

PCE Completion Summary

Company Name:	CARGILL SALT INC.-ST. CLAIR REFINERY	SRN: A6240
Address:	916 S RIVERSIDE	Staff: CJE
City:	ST. CLAIR	Type: ROP
County:	74	Report Date: 01/11/06

RECEIVED

Required Elements	Date PCE Documented	Compliance Status	Comments
Compliance Evaluation	01/11/06	C	MAR 22 2006 AIR ENFORCEMENT BRANCH, U.S. EPA, REGION 5
Annual Certification Report (& SaD Report)	02/25/05	C	NO violations were cited for annual certification report.
Semi-annual Deviation Report (SaD) (9/15)	07/25/05	NC	LOV was issued for CEM calibration outage. Significant improvement will be expected in next report. All quarterly reporting was sufficient
Required Reports (MACT, MAERs, malfunction, etc)	03/16/05	C	MAERs data was sufficient. MAERs submittal 3/1/6/05
Records and Operational Logs	01/11/06	C	All records requested appeared to be in compliance with the permit. See activity report A-SE-02218.
Monitored Data (CEM's, EER's, ETC.)	01/11/06	C	All CEMs and COMs data reviewed during inspection appeared to be in compliance with the permit. See activity report #A-SE-02218.
Assessment of Control Device Performance	01/11/06	C	Scrubbers, and particulate control appeared to be operating properly at the time of inspection. See activity report #A-SE-02218.
Assessment of Process Parameters	01/11/06	C	Process parameters appeared to be in compliance. See activity report #A-SE-02218.
VE Observations	01/11/06	C	Visible emissions appeared to be below 20% level for Boiler #5. No visible emissions were observed coming from salt processing. See activity report #A-SE-02218.
Stack Test Report	01/19/05	C	Testing on EGPRETZEL and EGSCREENING appeared acceptable.
Samples Analyzed	01/11/06	C	Staff collected coal samples during inspection. Sample was sent to lab on 1/19/06 for analysis. See activity report #A-SE-02218.
On Site Inspection	01/11/06	C	On-site inspection revealed no compliance issues. See activity report #A-SE-02218.

Additional Comments

AQD staff determined facility to be in compliance during 1/11/06 inspection. As a result, staff will request termination of Cargill Salt's Consent Order #7-2001. CJE

Staff Signature :

Supervisor Signature :

cc: Mr. Keshave Singh, Compliance Support Unit

PCE Completion Summary

Company Name:	CARGILL SALT INC.-ST. CLAIR REFINERY	SRN: A6240
Address:	916 S RIVERSIDE	Staff: CJE
City:	ST. CLAIR	Type: ROP-II
County:	74	Report Date: 11/17/03

The following were completed as part of: PCE

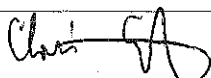
Required Elements	Date PCE Documented	Compliance Status	Comments
Full Compliance Evaluation			
Annual Certification Report (& SaD Report)			
Semi-annual Deviation Report (SaD) (9/15)	08/11/03	C	January - June 2003 All deviations have been addressed and corrective measures have been taken.
Required Reports (MACT, MAERs, malfunction, etc)	10/31/03	C	July - Sept quarterly emission exceedance reports for Boiler #5 showed a higher than usual downtime for CEMs.
Records and Operational Logs			
Monitored Data (CEM's, EER's, ETC.)			
Assessment of Control Device Performance			
Assessment of Process Parameters			
VE Observations			
Stack Test Report			
Samples Analyzed			
On Site Inspection			

RECEIVED
MAR 22 2006
AIR ENFORCEMENT BRANCH,
U.S. EPA, REGION 5

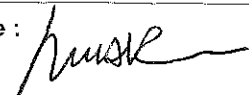
Additional Comments

03-Semi 1: All deviations have been addressed and corrective measures have been taken. Quarterly emission exceedance reports were submitted for Boiler #5 from July - September 2003. Reports showed a higher than usual downtime for CEMs associated with Boiler #5. AQD staff called Wade Richards on 11-12-03 to get clarification on the proposed solution. Mr. Richards will provide a copy of the proposed solution in the next two weeks.

Staff Signature :



Supervisor Signature :



cc: Mr. Keshave Singh, Compliance Support Unit

FCE Completion Summary

Company Name:	CARGILL SALT INC.-ST. CLAIR REFINERY	SRN: A6240
Address:	916 S RIVERSIDE	Staff: CJE
City:	ST. CLAIR	Type: ROP-II
County:	74	Report Date: 11/14/03

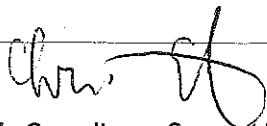
The following PCE's were completed as part of the FCE:

Required Elements	Date PCE Documented	Compliance Status	Comments
Full Compliance Evaluation			Violation, ROP
Annual Certification Report (& SaD Report)			
Semi-annual Deviation Report (SaD) (9/15)	08/11/03	C	
Required Reports (MACT, MAERs, malfunction, etc)	10/31/03	c	Quarterly emission exceedance reports were submitted for Boiler #5 from July - September 2003. Reports showed a higher than usual downtime for CEMs associated with
Records and Operational Logs			
Monitored Data (CEM's, EER's, ETC.)			
Assessment of Control Device Performance			
Assessment of Process Parameters			
VE Observations			
Stack Test Report			
Samples Analyzed			
On Site Inspection			

Additional Comments

January - June 2003 All deviations have been addressed and corrective measures have been taken.

Staff Signature :



Supervisor Signature :

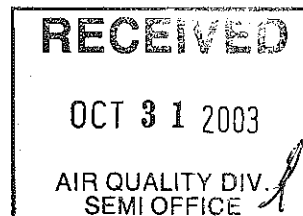
cc: Mr. Keshave Singh, Compliance Support Unit



CJE

October 20, 2003

Ms. Teresa Seidel
District Supervisor
MDEQ Air Quality Division
SE Michigan District Headquarters
38980 West Seven Mile Road
Livonia, MI 48152-1006



Re: Boiler No. 5 Quarterly Excess Emissions Report (EER) for Opacity for the 3rd quarter 2003

Dear Ms. Seidel:

This EER is being submitted in accordance with the quarterly reporting requirements in accordance with 40 CFR 60.7(c) and (d). Attached is summary report utilizing MDEQ's report form based on the format required by 40 CFR 60.7(d).

During the 2nd quarter, Boiler No. 5 operated within the opacity emission 99.73% of the boiler operating time. To put this compliance rate in perspective, we take note of the fact that 40 CFR 60.7(d) only requires the submission of more than the summary report when the source is in compliance less than 99% of the time. Attached in Table 1 is a list of exceedences including time, duration, and reason for the exceedence.

Consistent with our consent agreement, a listing of time, duration, and cause of each six-minute average greater than 20% is attached in Table 2. Note that not all readings greater than 20% constitute an exceedence as defined by MDEQ Rule 301.

Cargill had two power outage incidents this quarter that adversely affected #5 boiler. Both of these involved were internal Cargill owned Transformers. The first was minimized due to our preventative Maintenance process, and the second one was caused by rain leaking through a faulty roof. We had no emergency shutdowns this quarter. Cargill Salt, St. Clair has identified (four) main causes for the six-minute opacity averages in exceedence of MDEQ Rule 301. See Table 1. They are listed below along with the corrective actions and preventative measures. The summary below also includes the percentage of the total exceedences caused by the particular problem.

Cause

Corrective Action Taken or Preventative Measure Adopted

Other Known Causes
(44%)

We had 26 total exceedences from other known causes.

Eight of these exceedences came from a leak in our roof onto a transformer. This caused us to lose all of the fans on the boiler. We were able to continue to operate the boiler without losing pressure. We are evaluating the roof structure and it's repair.

We had 8 exceedences when we locked up the East and West stoker bearing. We changed the East bearing on the run after we verified lubrication procedures. The West

ran after additional lubrication. The lubrication frequency was updated. We will change these rotors out during our 4th quarter scheduled outage.

Three exceedences were from A/F transformer being shutdown due to low oil level and elevated temperatures. The PM program that we have on our transformers picked up a potential catastrophic failure if shutdown it was not planned.

Three exceedences were caused when a nut backed off of the Stoker Grate Drive. A Stoker representative inspected the Grate Drive during our last outage. We will continue to observe each shutdown opportunity including 4th quarter outage.

1 exceedence was created when the East Stoker drag chain cotter pin came out and jammed the stoker. These were changed with roll pins and corrected the problem. We changed all three drag chain pins. We are evaluating with Detroit Stoker future plan. We believe the pin had a defect to begin with.

1 exceedence was from the baghouse during its hourly cleaning cycle.

1 exceedence was for high electric load.

1 exceedence was for an air actuated valve failure.

Soot blowing
(41%)

The 24 soot-blowing exceedences were less than half of last quarter's total. With the parts available for the mechanical collector this should lessen this total.

Unknown Causes
(8%)

5 exceedences were not identified.

Process problems
(7%)

We had 5 exceedences attributed to Process problems.

A clinker falling off the wall and blocking our lower over fire air nozzles caused 2 exceedences. We have reviewed this with the operators and are monitoring for future obstructions.

2 exceedences were related to the water coming in with our coal. During a rain event we had water coming into our boiler with the coal.

If you have any questions please call me at 810-326-2841.

Sincerely,



Wade D. Richards
Powerhouse Superintendent

cc: Dan Taylor
Don Chutas
Gene Chauffe
Janice Richards
Tom Gasloli,
MDEQ, Air Quality Division
PO Box 30260
Lansing, MI 48909

Attachments

Michigan Department of Environmental Quality Air Quality Division Summary #5 Boiler

Table 1 – Opacity Excursions

Table 2 – 6 minute Opacity Readings > 20% (excluding opacity excursions listed in Table 1)

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

Summary Report for Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant: Opacity Reporting period: Third quarter, 2003

Company: Cargill Salt Unit Description: Boiler #5, 100,000 #/hour

Emission Limit: R336.1301 (1) Total Source Operation Time 132480 min

Monitor Manufacturer, Model No., & Serial No.: Durag DR 90, #403074

Emission Data Summary

1	Duration of Excess Emissions (EE) in reporting period due to:	
a.	Startup/Shutdown	<u>0</u>
b.	Soot Blowing	<u>144</u>
c.	Control Equipment Problems	<u>0</u>
d.	Process Problems	<u>24</u>
e.	Other Known Causes	<u>156</u>
f.	Unknown Causes	<u>30</u>
2	Total Durations of EE's	<u>354</u>
3	Total Duration of EE's/Total Source Operation Time X 100	<u>0.27 %</u>

CEM System Summary

1	CEM system downtime in reporting period due to:	
a.	Monitor Equipment Malfunctions	<u>0</u>
b.	Non-Monitor Equipment Malfunctions	<u>2286</u>
c.	Quality Assurance Calibrations (Excess)	<u>42</u>
d.	Other Known Causes	<u>0</u>
e.	Unknown Causes	<u>0</u>
2	Total CEM System Downtime	<u>2328</u>
3	Total CEM System Downtime/Total Source Operation Time X 100	<u>1.76 %</u>

Comments: Data Acquisition system failed for 38 hours September 26 7:54 AM until September 27 10 PM. The DAS support group is looking at alternatives to minimize this risk in the future.

I certify that the information contained in this report is true, accurate and complete.

Signature: 

Date: 10/29/03

Table 1 - OPACITY EXCURSIONS

Number	Date	Time	Boiler 5 Opacity	Comment	Comment Detail
1	7/11/03	2:54 AM	23	Other Known Causes	Load high, air dryer kicked on
2	7/16/03	6:30 AM	43	Other Known Causes	Nut backed off weight for grate drive
3	7/16/03	6:42 AM	28	Other Known Causes	Nut backed off weight for grate drive
4	7/16/03	6:48 AM	32	Other Known Causes	Nut backed off weight for grate drive
5	7/18/03	5:48 PM	25	Soot Blowing	Soot blowing
6	7/18/03	11:54 PM	21	Soot Blowing	Soot blowing
7	7/22/03	8:54 PM	21	Soot Blowing	Soot blowing
8	7/23/03	10:06 AM	23	Unknown Causes	Unknown
9	7/23/03	10:42 AM	22	Unknown Causes	Unknown
10	7/24/03	5:54 AM	23	Soot Blowing	Soot blowing
11	7/24/03	6:24 AM	26	Soot Blowing	Soot blowing
12	7/24/03	12:42 PM	21	Soot Blowing	Soot blowing
13	7/25/03	3:48 PM	22	Soot Blowing	Soot blowing
14	7/25/03	5:48 PM	23	Soot Blowing	Soot blowing
15	7/30/03	11:48 PM	24	Soot Blowing	Soot blowing
16	8/5/03	2:30 PM	34	Other Known Causes	Safety shutoff gas valve failed on West Co-fire burner
17	8/6/03	7:54 PM	28	Soot Blowing	Soot blowing
18	8/15/03	6:42 PM	27	Soot Blowing	Soot blowing
19	8/15/03	6:48 PM	23	Soot Blowing	Soot blowing
20	8/15/03	9:42 PM	23	Soot Blowing	Soot blowing
21	8/20/03	9:24 PM	50	Process Problems	Clinker fell off back wall and blocked OFA
22	8/20/03	9:30 PM	54	Process Problems	Clinker fell off back wall and blocked OFA
23	8/24/03	7:54 AM	28	Soot Blowing	Soot blowing
24	8/25/03	6:00 AM	27	Soot Blowing	Soot blowing
25	8/25/03	3:42 PM	21	Unknown Causes	Unknown
26	8/26/03	8:54 AM	33	Soot Blowing	Soot blowing
27	8/27/03	6:54 AM	30	Soot Blowing	Soot blowing
28	9/2/03	5:54 PM	23	Soot Blowing	Soot blowing
29	9/3/03	11:42 AM	21	Other Known Causes	East stoker bearing failure
30	9/3/03	12:06 PM	22	Other Known Causes	East stoker bearing failure
31	9/3/03	12:12 PM	21	Other Known Causes	East stoker bearing failure
32	9/3/03	2:24 PM	37	Other Known Causes	East stoker bearing failure
33	9/3/03	2:36 PM	26	Other Known Causes	East stoker bearing failure
34	9/3/03	2:42 PM	24	Other Known Causes	East stoker bearing failure
35	9/4/03	5:54 AM	27	Soot Blowing	Soot blowing
36	9/4/03	8:36 AM	32	Other Known Causes	West stoker locked up
37	9/4/03	8:42 AM	37	Other Known Causes	West stoker locked up
38	9/8/03	10:18 AM	33	Other Known Causes	East stoker drag chain pin came out
39	9/10/03	7:54 PM	21	Soot blowing	Soot blowing
40	9/12/03	6:48 AM	22	Soot Blowing	Soot blowing
41	9/12/03	7:54 AM	27	Soot Blowing	Soot blowing
42	9/12/03	9:36 AM	21	Soot Blowing	Soot blowing
43	9/16/03	8:00 PM	28	Other Known Causes	A/F Transformer shutdown due to low oil
44	9/16/03	8:06 PM	64	Other Known Causes	A/F Transformer shutdown due to low oil
45	9/16/03	8:12 PM	50	Other Known Causes	A/F Transformer shutdown due to low oil

Table 1 - OPACITY EXCURSIONS

Number	Date	Time	Boiler 5 Opacity	Comment	Comment Detail
46	9/17/03	6:36 PM	27	Unknown Causes	Unknown
47	9/19/03	8:18 AM	21	Process Problems	Wet coal due to rain in the pit
48	9/19/03	10:42 AM	28	Process Problems	Wet coal due to rain in the pit
49	9/21/03	8:42 AM	24	Unknown Causes	Unknown
50	9/22/03	5:12 PM	32	Other Known Causes	Water in T6 transformer, took out MCC 4
51	9/22/03	5:24 PM	48	Other Known Causes	Water in T6 transformer, took out MCC 4
52	9/22/03	5:30 PM	27	Other Known Causes	Water in T6 transformer, took out MCC 4
53	9/22/03	5:36 PM	22	Other Known Causes	Water in T6 transformer, took out MCC 4
54	9/22/03	5:42 PM	21	Other Known Causes	Water in T6 transformer, took out MCC 4
55	9/22/03	5:48 PM	24	Other Known Causes	Water in T6 transformer, took out MCC 4
56	9/22/03	6:06 PM	45	Other Known Causes	Water in T6 transformer, took out MCC 4
57	9/22/03	6:12 PM	33	Other Known Causes	Water in T6 transformer, took out MCC 4
58	9/26/03	12:18 AM	24	Other Known Causes	Baghouse
59	9/26/03	6:48 AM	28	Soot Blowing	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
7/1/03	6:54 AM	22	No	Within emission limits	Soot blowing
7/1/03	1:48 PM	22	No	Within emission limits	Soot blowing
7/1/03	5:48 PM	23	No	Within emission limits	Soot blowing
7/2/03	5:54 AM	21	No	Within emission limits	Soot blowing
7/2/03	6:54 AM	23	No	Within emission limits	Soot blowing
7/2/03	8:54 AM	21	No	Within emission limits	Soot blowing
7/2/03	3:42 PM	21	No	Within emission limits	Soot blowing
7/2/03	5:48 PM	22	No	Within emission limits	Soot blowing
7/3/03	1:42 PM	21	No	Within emission limits	Soot blowing
7/3/03	8:48 PM	22	No	Within emission limits	Soot blowing
7/3/03	11:48 PM	23	No	Within emission limits	Soot blowing
7/4/03	5:48 AM	21	No	Within emission limits	Soot blowing
7/4/03	11:42 PM	21	No	Within emission limits	Soot blowing
7/5/03	1:42 AM	21	No	Within emission limits	Soot blowing
7/5/03	5:54 PM	21	No	Within emission limits	Soot blowing
7/6/03	11:48 PM	21	No	Within emission limits	Soot blowing
7/7/03	7:48 AM	25	No	Within emission limits	Soot blowing
7/7/03	8:42 AM	22	No	Within emission limits	Soot blowing
7/7/03	5:48 PM	22	No	Within emission limits	Soot blowing
7/8/03	5:54 AM	24	No	Within emission limits	Soot blowing
7/8/03	7:48 AM	25	No	Within emission limits	Soot blowing
7/8/03	5:48 PM	23	No	Within emission limits	Soot blowing
7/8/03	11:48 PM	22	No	Within emission limits	Soot blowing
7/9/03	2:42 AM	21	No	Within emission limits	Soot blowing
7/9/03	5:54 AM	21	No	Within emission limits	Soot blowing
7/9/03	7:54 AM	24	No	Within emission limits	Soot blowing
7/9/03	8:48 AM	23	No	Within emission limits	Soot blowing
7/9/03	5:48 PM	22	No	Within emission limits	Soot blowing
7/9/03	7:48 PM	22	No	Within emission limits	Soot blowing
7/9/03	11:48 PM	22	No	Within emission limits	Soot blowing
7/10/03	5:54 AM	23	No	Within emission limits	Soot blowing
7/10/03	6:48 AM	22	No	Within emission limits	Soot blowing
7/10/03	7:54 AM	21	No	Within emission limits	Soot blowing
7/10/03	5:48 PM	21	No	Within emission limits	Soot blowing
7/10/03	11:48 PM	21	No	Within emission limits	Soot blowing
7/11/03	2:48 AM	22	No	Within emission limits	Load high, air dryer kicked on
7/11/03	6:48 AM	24	No	Within emission limits	Soot blowing
7/11/03	7:48 AM	22	No	Within emission limits	Soot blowing
7/11/03	10:48 AM	22	No	Within emission limits	Soot blowing
7/11/03	5:48 PM	22	No	Within emission limits	Soot blowing
7/12/03	6:48 AM	24	No	Within emission limits	Soot blowing
7/12/03	11:54 AM	23	No	Within emission limits	Soot blowing
7/12/03	5:48 PM	21	No	Within emission limits	Soot blowing
7/12/03	11:48 PM	22	No	Within emission limits	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
7/13/03	6:54 AM	23	No	Within emission limits	Soot blowing
7/13/03	6:48 PM	23	No	Within emission limits	Soot blowing
7/13/03	7:48 PM	22	No	Within emission limits	Soot blowing
7/13/03	9:42 PM	21	No	Within emission limits	Soot blowing
7/13/03	11:48 PM	22	No	Within emission limits	Soot blowing
7/14/03	6:54 AM	23	No	Within emission limits	Soot blowing
7/14/03	8:54 AM	21	No	Within emission limits	Soot blowing
7/14/03	4:42 PM	21	No	Within emission limits	Soot blowing
7/14/03	5:42 PM	21	No	Within emission limits	Soot blowing
7/14/03	6:42 PM	24	No	Within emission limits	Soot blowing
7/14/03	7:42 PM	24	No	Within emission limits	Soot blowing
7/14/03	8:42 PM	23	No	Within emission limits	Soot blowing
7/14/03	10:42 PM	21	No	Within emission limits	Soot blowing
7/14/03	11:42 PM	26	No	Within emission limits	Soot blowing
7/15/03	6:48 AM	24	No	Within emission limits	Soot blowing
7/15/03	8:54 AM	25	No	Within emission limits	Soot blowing
7/15/03	12:54 PM	23	No	Within emission limits	Soot blowing
7/15/03	7:54 PM	21	No	Within emission limits	Soot blowing
7/15/03	11:48 PM	23	No	Within emission limits	Soot blowing
7/16/03	12:42 AM	21	No	Within emission limits	Soot blowing
7/16/03	5:54 AM	21	No	Within emission limits	Soot blowing
7/16/03	6:36 AM	24	No	Within emission limits	Nut backed off weight for grate drive
7/16/03	7:48 AM	22	No	Within emission limits	Soot blowing
7/16/03	8:48 AM	24	No	Within emission limits	Soot blowing
7/16/03	2:54 PM	21	No	Within emission limits	Soot blowing
7/16/03	6:48 PM	21	No	Within emission limits	Soot blowing
7/16/03	7:48 PM	21	No	Within emission limits	Soot blowing
7/16/03	11:48 PM	23	No	Within emission limits	Soot blowing
7/17/03	7:54 AM	24	No	Within emission limits	Soot blowing
7/17/03	8:48 AM	25	No	Within emission limits	Soot blowing
7/17/03	5:48 PM	22	No	Within emission limits	Soot blowing
7/18/03	5:54 AM	23	No	Within emission limits	Soot blowing
7/18/03	6:48 AM	24	No	Within emission limits	Soot blowing
7/18/03	2:42 PM	26	No	Within emission limits	Soot blowing
7/18/03	5:42 PM	21	No	Within emission limits	Soot blowing
7/18/03	6:48 PM	23	No	Within emission limits	Soot blowing
7/18/03	7:48 PM	24	No	Within emission limits	Soot blowing
7/18/03	11:48 PM	25	No	Within emission limits	Soot blowing
7/19/03	12:42 AM	21	No	Within emission limits	Soot blowing
7/19/03	7:48 AM	23	No	Within emission limits	Soot blowing
7/19/03	9:54 AM	21	No	Within emission limits	Soot blowing
7/19/03	5:48 PM	23	No	Within emission limits	Soot blowing
7/19/03	11:48 PM	22	No	Within emission limits	Soot blowing
7/20/03	6:54 AM	23	No	Within emission limits	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
7/20/03	7:54 AM	22	No	Within emission limits	Soot blowing
7/20/03	11:48 PM	21	No	Within emission limits	Soot blowing
7/21/03	7:54 AM	24	No	Within emission limits	Soot blowing
7/21/03	1:42 PM	21	No	Within emission limits	Soot blowing
7/21/03	7:48 PM	21	No	Within emission limits	Soot blowing
7/21/03	8:48 PM	23	No	Within emission limits	Soot blowing
7/21/03	11:48 PM	22	No	Within emission limits	Soot blowing
7/22/03	8:48 PM	21	No	Within emission limits	Soot blowing
7/23/03	5:36 AM	25	No	Within emission limits	Soot blowing
7/23/03	6:54 AM	22	No	Within emission limits	Soot blowing
7/23/03	7:42 AM	21	No	Within emission limits	Soot blowing
7/23/03	8:54 AM	21	No	Within emission limits	Soot blowing
7/23/03	9:48 AM	21	No	Within emission limits	Soot blowing
7/23/03	10:00 AM	21	No	Within emission limits	Unknown
7/23/03	11:48 AM	22	No	Within emission limits	Soot blowing
7/23/03	12:42 PM	24	No	Within emission limits	Soot blowing
7/23/03	2:48 PM	23	No	Within emission limits	Soot blowing
7/23/03	3:48 PM	23	No	Within emission limits	Soot blowing
7/23/03	4:42 PM	21	No	Within emission limits	Soot blowing
7/23/03	5:42 PM	22	No	Within emission limits	Soot blowing
7/23/03	6:48 PM	21	No	Within emission limits	Soot blowing
7/23/03	8:54 PM	22	No	Within emission limits	Soot blowing
7/23/03	10:42 PM	23	No	Within emission limits	Soot blowing
7/23/03	11:42 PM	22	No	Within emission limits	Soot blowing
7/24/03	12:42 AM	21	No	Within emission limits	Soot blowing
7/24/03	1:42 AM	22	No	Within emission limits	Soot blowing
7/24/03	2:42 AM	22	No	Within emission limits	Soot blowing
7/24/03	3:42 AM	21	No	Within emission limits	Soot blowing
7/24/03	4:42 AM	21	No	Within emission limits	Soot blowing
7/24/03	5:42 AM	23	No	Within emission limits	Soot blowing
7/24/03	6:18 AM	22	No	Within emission limits	Soot blowing
7/24/03	7:42 AM	21	No	Within emission limits	Soot blowing
7/24/03	12:36 PM	26	No	Within emission limits	Soot blowing
7/24/03	2:42 PM	21	No	Within emission limits	Soot blowing
7/24/03	3:54 PM	22	No	Within emission limits	Soot blowing
7/24/03	6:48 PM	23	No	Within emission limits	Soot blowing
7/24/03	7:48 PM	22	No	Within emission limits	Soot blowing
7/25/03	5:42 AM	21	No	Within emission limits	Soot blowing
7/25/03	7:48 AM	23	No	Within emission limits	Soot blowing
7/25/03	8:48 AM	23	No	Within emission limits	Soot blowing
7/25/03	3:42 PM	21	No	Within emission limits	Soot blowing
7/25/03	4:42 PM	22	No	Within emission limits	Soot blowing
7/25/03	5:42 PM	22	No	Within emission limits	Soot blowing
7/25/03	6:48 PM	24	No	Within emission limits	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
7/25/03	7:48 PM	22	No	Within emission limits	Soot blowing
7/26/03	12:42 AM	21	No	Within emission limits	Soot blowing
7/26/03	7:48 AM	22	No	Within emission limits	Soot blowing
7/26/03	12:48 PM	22	No	Within emission limits	Soot blowing
7/27/03	11:54 AM	23	No	Within emission limits	Soot blowing
7/27/03	7:54 PM	21	No	Within emission limits	Soot blowing
7/28/03	5:12 AM	24	No	Within emission limits	Soot blowing
7/28/03	8:54 AM	21	No	Within emission limits	Soot blowing
7/28/03	5:48 PM	22	No	Within emission limits	Soot blowing
7/28/03	7:54 PM	23	No	Within emission limits	Soot blowing
7/28/03	10:42 PM	21	No	Within emission limits	Baghouse cleaning
7/28/03	11:54 PM	24	No	Within emission limits	Soot blowing
7/29/03	12:42 AM	21	No	Within emission limits	Soot blowing
7/29/03	5:48 PM	21	No	Within emission limits	Soot blowing
7/29/03	11:48 PM	21	No	Within emission limits	Soot blowing
7/30/03	2:42 PM	21	No	Within emission limits	Soot blowing
7/30/03	5:48 PM	23	No	Within emission limits	Soot blowing
7/30/03	6:48 PM	23	No	Within emission limits	Soot blowing
7/30/03	7:48 PM	24	No	Within emission limits	Soot blowing
7/30/03	11:42 PM	21	No	Within emission limits	Soot blowing
7/31/03	8:48 AM	25	No	Within emission limits	Soot blowing
7/31/03	9:48 AM	25	No	Within emission limits	Soot blowing
7/31/03	5:42 PM	21	No	Within emission limits	Soot blowing
7/31/03	6:48 PM	23	No	Within emission limits	Soot blowing
7/31/03	7:48 PM	21	No	Within emission limits	Soot blowing
8/1/03	1:12 AM	25	No	Within emission limits	Air dryer on and doors open on boiler to pull ash
8/1/03	5:54 AM	21	No	Within emission limits	Soot blowing
8/1/03	6:42 PM	21	No	Within emission limits	Soot blowing
8/1/03	9:48 PM	22	No	Within emission limits	Soot blowing
8/3/03	7:54 PM	21	No	Within emission limits	Soot blowing
8/6/03	8:54 PM	21	No	Within emission limits	Soot blowing
8/7/03	6:48 PM	21	No	Within emission limits	Soot blowing
8/8/03	8:48 AM	23	No	Within emission limits	Soot blowing
8/8/03	9:48 AM	23	No	Within emission limits	Soot blowing
8/8/03	5:54 PM	23	No	Within emission limits	Soot blowing
8/10/03	5:48 PM	22	No	Within emission limits	Soot blowing
8/11/03	9:48 AM	21	No	Within emission limits	Soot blowing
8/11/03	8:48 PM	21	No	Within emission limits	Soot blowing
8/11/03	10:48 PM	21	No	Within emission limits	Soot blowing
8/12/03	6:54 AM	22	No	Within emission limits	Soot blowing
8/15/03	5:42 PM	21	No	Within emission limits	Soot blowing
8/15/03	6:36 PM	23	No	Within emission limits	Soot blowing
8/15/03	7:42 PM	21	No	Within emission limits	Soot blowing
8/15/03	8:42 PM	22	No	Within emission limits	Soot blowing
8/15/03	9:36 PM	22	No	Within emission limits	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
8/18/03	7:00 AM	21	No	Within emission limits	Soot blowing
8/18/03	7:54 PM	22	No	Within emission limits	Soot blowing
8/19/03	11:00 AM	22	No	Within emission limits	Soot blowing
8/19/03	12:54 PM	21	No	Within emission limits	Soot blowing
8/19/03	10:00 PM	21	No	Within emission limits	Soot blowing
8/20/03	4:36 AM	22	No	Within emission limits	Soot blowing
8/20/03	5:54 AM	23	No	Within emission limits	Soot blowing
8/20/03	11:48 AM	21	No	Within emission limits	Soot blowing
8/20/03	4:42 PM	21	No	Within emission limits	Soot blowing
8/20/03	6:54 PM	21	No	Within emission limits	Soot blowing
8/20/03	7:54 PM	22	No	Within emission limits	Soot blowing
8/20/03	9:42 PM	25	No	Within emission limits	Clinker fell off back wall and blocked OFA
8/21/03	5:54 AM	21	No	Within emission limits	Soot blowing
8/21/03	7:54 AM	21	No	Within emission limits	Soot blowing
8/21/03	11:30 AM	21	No	Within emission limits	Soot blowing
8/21/03	6:54 PM	21	No	Within emission limits	Soot blowing
8/21/03	11:54 PM	23	No	Within emission limits	Soot blowing
8/22/03	11:48 AM	22	No	Within emission limits	Soot blowing
8/22/03	3:42 PM	21	No	Within emission limits	Baghouse cleaning
8/22/03	7:00 PM	22	No	Within emission limits	Soot blowing
8/23/03	5:54 AM	21	No	Within emission limits	Soot blowing
8/23/03	11:54 PM	22	No	Within emission limits	Soot blowing
8/24/03	5:54 AM	22	No	Within emission limits	Soot blowing
8/24/03	6:54 AM	24	No	Within emission limits	Soot blowing
8/24/03	6:54 PM	24	No	Within emission limits	Soot blowing
8/25/03	6:54 AM	22	No	Within emission limits	Soot blowing
8/25/03	8:48 AM	24	No	Within emission limits	Soot blowing
8/25/03	3:36 PM	22	No	Within emission limits	??
8/25/03	4:42 PM	21	No	Within emission limits	Baghouse
8/25/03	6:36 PM	21	No	Within emission limits	Baghouse, soot blowing?
8/25/03	10:42 PM	21	No	Within emission limits	Baghouse
8/26/03	4:00 AM	25	No	Within emission limits	Soot blowing
8/26/03	6:54 AM	24	No	Within emission limits	Soot blowing
8/26/03	6:54 PM	23	No	Within emission limits	Soot blowing
8/27/03	5:54 AM	25	No	Within emission limits	Soot blowing
8/27/03	6:36 AM	21	No	Within emission limits	Baghouse
8/27/03	7:36 AM	21	No	Within emission limits	Baghouse
8/27/03	12:42 PM	21	No	Within emission limits	Baghouse
8/27/03	4:42 PM	21	No	Within emission limits	Baghouse
8/27/03	7:48 PM	21	No	Within emission limits	Soot blowing
8/27/03	9:54 PM	21	No	Within emission limits	Soot blowing
8/29/03	7:54 PM	22	No	Within emission limits	Soot blowing
8/30/03	6:54 PM	21	No	Within emission limits	Soot blowing
9/1/03	3:42 AM	24	No	Within emission limits	Baghouse

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
9/1/03	7:48 AM	22	No	Within emission limits	Soot blowing
9/1/03	5:54 PM	21	No	Within emission limits	Soot blowing
9/2/03	6:54 AM	21	No	Within emission limits	Soot blowing
9/2/03	12:42 PM	21	No	Within emission limits	Baghouse
9/2/03	2:42 PM	21	No	Within emission limits	Baghouse
9/2/03	5:42 PM	21	No	Within emission limits	Baghouse
9/3/03	7:18 AM	21	No	Within emission limits	Unknown
9/3/03	8:54 AM	21	No	Within emission limits	Soot blowing
9/3/03	11:36 AM	23	No	Within emission limits	East stoker bearing failure
9/3/03	12:00 PM	25	No	Within emission limits	East stoker bearing failure
9/3/03	5:54 PM	21	No	Within emission limits	Soot blowing
9/4/03	2:42 AM	21	No	Within emission limits	Baghouse
9/4/03	6:12 AM	21	No	Within emission limits	Co fire fans on low speed
9/4/03	8:24 AM	21	No	Within emission limits	West stoker locked up
9/4/03	10:36 AM	24	No	Within emission limits	Baghouse
9/4/03	11:24 AM	21	No	Within emission limits	Baghouse
9/4/03	3:48 PM	24	No	Within emission limits	Soot blowing
9/5/03	1:24 PM	21	No	Within emission limits	Baghouse
9/5/03	2:24 PM	21	No	Within emission limits	Baghouse
9/5/03	5:54 PM	24	No	Within emission limits	Soot blowing
9/5/03	7:54 PM	23	No	Within emission limits	Soot blowing
9/7/03	11:42 AM	22	No	Within emission limits	Soot blowing
9/7/03	5:54 PM	24	No	Within emission limits	Soot blowing
9/7/03	7:24 PM	25	No	Within emission limits	Baghouse
9/8/03	5:54 PM	23	No	Within emission limits	Soot blowing
9/8/03	6:54 PM	25	No	Within emission limits	Soot blowing
9/10/03	7:42 AM	22	No	Within emission limits	Soot blowing
9/11/03	5:54 PM	21	No	Within emission limits	Soot blowing
9/12/03	6:36 AM	21	No	Within emission limits	Baghouse cleaning
9/12/03	8:18 AM	21	No	Within emission limits	Baghouse
9/12/03	9:18 AM	23	No	Within emission limits	Baghouse
9/12/03	1:24 PM	22	No	Within emission limits	Baghouse
9/12/03	3:24 PM	22	No	Within emission limits	Baghouse
9/12/03	4:24 PM	21	No	Within emission limits	Baghouse
9/13/03	7:48 AM	25	No	Within emission limits	Soot blowing
9/13/03	10:54 AM	26	No	Within emission limits	Soot blowing
9/14/03	5:54 AM	22	No	Within emission limits	Soot blowing
9/15/03	5:54 AM	21	No	Within emission limits	Soot blowing
9/17/03	4:18 PM	21	No	Within emission limits	Baghouse cleaning
9/17/03	5:48 PM	22	No	Within emission limits	Soot blowing
9/17/03	6:42 PM	22	No	Within emission limits	Unknown
9/17/03	7:48 PM	21	No	Within emission limits	Soot blowing
9/17/03	9:54 PM	22	No	Within emission limits	Soot blowing
9/17/03	11:24 PM	21	No	Within emission limits	Baghouse

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
9/18/03	6:48 AM	21	No	Within emission limits	Soot blowing
9/18/03	7:48 AM	21	No	Within emission limits	Soot blowing
9/18/03	5:48 PM	21	No	Within emission limits	Soot blowing
9/19/03	8:12 AM	21	No	Within emission limits	Wet coal due to rain in the pit
9/19/03	10:18 AM	23	No	Within emission limits	Wet coal due to rain in the pit
9/19/03	12:42 PM	21	No	Within emission limits	Wet coal due to rain in the pit
9/20/03	7:54 AM	21	No	Within emission limits	Soot blowing
9/21/03	5:48 AM	23	No	Within emission limits	Soot blowing
9/21/03	7:48 AM	22	No	Within emission limits	Soot blowing
9/21/03	8:36 AM	22	No	Within emission limits	Unknown
9/21/03	9:00 AM	22	No	Within emission limits	Unknown
9/21/03	1:18 PM	25	No	Within emission limits	Soot blowing
9/21/03	5:54 PM	24	No	Within emission limits	Soot blowing
9/21/03	6:54 PM	22	No	Within emission limits	Soot blowing
9/22/03	5:54 AM	24	No	Within emission limits	Soot blowing
9/22/03	6:54 AM	22	No	Within emission limits	Soot blowing
9/22/03	5:18 PM	21	No	Within emission limits	Water in T6 transformer, took out MCC 4
9/22/03	10:54 PM	22	No	Within emission limits	Soot blowing
9/23/03	1:48 AM	25	No	Within emission limits	Soot blowing
9/23/03	5:54 AM	23	No	Within emission limits	Soot blowing
9/24/03	5:54 AM	25	No	Within emission limits	Soot blowing
9/24/03	7:54 AM	21	No	Within emission limits	Soot blowing
9/24/03	1:48 PM	21	No	Within emission limits	Soot blowing
9/24/03	7:06 PM	21	No	Within emission limits	Air dryer
9/24/03	11:48 PM	23	No	Within emission limits	Soot blowing
9/25/03	6:48 AM	21	No	Within emission limits	Soot blowing
9/25/03	7:42 AM	24	No	Within emission limits	Soot blowing
9/25/03	8:06 AM	21	No	Within emission limits	Unkown
9/25/03	11:48 PM	21	No	Within emission limits	Center stoker paused because chain was to loose
9/26/03	12:00 AM	21	No	Within emission limits	Center stoker paused because chain was to loose
9/26/03	5:18 AM	21	No	Within emission limits	Baghouse
9/26/03	7:42 AM	22	No	Within emission limits	Soot blowing
9/27/03	10:18 PM	21	No	Within emission limits	Soot blowing
9/28/03	7:48 PM	21	No	Within emission limits	Soot blowing
9/28/03	8:48 PM	23	No	Within emission limits	Soot blowing
9/29/03	11:36 AM	21	No	Within emission limits	Soot blowing
9/30/03	2:18 AM	21	No	Within emission limits	Soot blowing



July 20, 2004

Ms. Teresa Seidel
District Supervisor
MDEQ Air Quality Division
SE Michigan District Headquarters
38980 West Seven Mile Road
Livonia, MI 48152-1006

Re: Boiler No. 5 Quarterly Excess Emissions Report (EER) for Opacity for the 2nd quarter 2004

Dear Ms. Seidel:

This EER is being submitted in accordance with the quarterly reporting requirements of 40 CFR 60.7(c) and (d). Attached is a summary utilizing MDEQ's report form based on the format required by 40 CFR 60.7(d).

During the 4th quarter, Boiler No. 5 operated within the opacity emission 99.74% of the boiler operating time. To put this compliance rate in perspective, we take note of the fact that 40 CFR 60.7(d) only requires the submission of more than the summary report when the source is in compliance less than 99% of the time. Attached in Table 1 is a list of exceedences including time, duration, and reason for the exceedence.

Consistent with our consent agreement, a listing of time, duration, and cause of each six-minute average greater than 20% is attached in Table 2. Note that not all readings greater than 20% constitute an exceedence as defined by MDEQ Rule 301.

Cargill had two scheduled shutdowns this quarter. Cargill Salt, St. Clair has identified (five) main causes for the six-minute opacity averages in exceedence of MDEQ Rule 301. See Table 1. They are listed below along with the corrective actions and preventative measures. The summary below also includes the percentage of the total exceedences caused by the particular problem.

Cause

Corrective Action Taken or Preventative Measure Adopted

Startup/shutdowns
(55%)

Eleven exceedences were caused when the air supply was not opened to the boiler. This was closed due to non-routine work. After our June outage work the air flow is much less critical because of the volume of air flow through Induced Draft fan wheel and repaired damper.

Four exceedences were from co-fire burner system tripping. The burner fire eye was blinded over with clinkers that disrupted the flame signal.

Four exceedences were due the baghouse damper failing closed. The damper is on order and will be replaced next outage.

Four exceedences were due to the Forced Draft Fan tripping electrically on startup. The fan was reset and verified that there were no further concerns.

Three exceedences were from the coal chute plugging. We have replaced this transition during our June outage.

Soot blowing
(9%)

The 4 soot-blowing exceedences was a decrease from 7 in the 1st quarter of 2004 and 50 in the 2nd quarter of 2003

Process problems
(30%)

Ten exceedences were caused by wet coal. The coal system was underwater and we fed water in with our coal. We had an excessive amount of rain and the float was stuck on the pump. The pit is checked prior to starting the system.

Three exceedences were attributed to running after making air flow changes on the over fire air nozzles.

One exceedence for a electric load swing due to the Brine Field Injection Transformer. #5 boiler was running in automatic. This loop has been tuned to be able to handle the smaller electric load swings.

Other Known Causes
(6%)

Three exceedences were from the air piping breaking. This was replaced and as stated before is much less critical to our operation after our June outage.

If you have any questions please call me at 810-326-2841.

Sincerely,



Wade D. Richards
Powerhouse Superintendent

cc: Don Chutas
EHS File

Tom Gasloli,
MDEQ, Air Quality Division
PO Box 30260
Lansing, MI 48909

Attachments

Michigan Department of Environmental Quality Air Quality Division Summary #5 Boiler
Table 1 - Opacity Excursions
Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in Table 1)

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

Summary Report for Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant: Opacity Reporting period: Second quarter, 2004

Company: Cargill Salt Unit Description: Boiler #5, 100,000 #/hour

Emission Limit: R336.1301 (1) Total Source Operation Time 110214 min

Monitor Manufacturer, Model No., & Serial No.: Durag DR 90, #403074

Emission Data Summary

1	Duration of Excess Emissions (EE) in reporting period due to:	
	a. Startup/Shutdown	<u>156</u>
	b. Soot Blowing	<u>24</u>
	c. Control Equipment Problems	<u>0</u>
	d. Process Problems	<u>84</u>
	e. Other Known Causes	<u>18</u>
	f. Unknown Causes	<u>0</u>
2	Total Durations of EE's	<u>282</u>
3	Total Duration of EE's/Total Source Operation Time X 100	<u>0.26 %</u>

CEM System Summary

1	CEM system downtime in reporting period due to:	
	a. Monitor Equipment Malfunctions	<u>0</u>
	b. Non-Monitor Equipment Malfunctions	<u>0</u>
	c. Quality Assurance Calibrations (Excess)	<u>30</u>
	d. Other Known Causes	<u>0</u>
	e. Unknown Causes	<u>0</u>
2	Total CEM System Downtime	<u>30</u>
3	Total CEM System Downtime/Total Source Operation Time X 100	<u>0.03 %</u>

Comments: _____

I certify that the information contained in this report is true, accurate and complete.

Signature: _____

Date: 7/29/04

Table 1 - OPACITY EXCURSIONS

Number	Date	Time	Boiler 5 Opacity	Comment	Comment Detail
1	04/06/04	12:24 AM	48	Startup/shutdown	Startup/shutdown Co-fire tripped
2	04/06/04	12:30 AM	39	Startup/shutdown	Startup/shutdown Co-fire tripped
3	04/06/04	12:36 AM	44	Startup/shutdown	Startup/shutdown Co-fire tripped
4	04/06/04	12:42 AM	30	Startup/shutdown	Startup/shutdown Co-fire tripped
5	04/07/04	3:36 PM	92	Startup/shutdown	Startup/shutdown coal feed chute plugged
6	04/07/04	3:42 PM	35	Startup/shutdown	Startup/shutdown coal feed chute plugged
7	04/07/04	3:48 PM	43	Startup/shutdown	Startup/shutdown coal feed chute plugged
8	04/07/04	3:54 PM	38	Startup/shutdown	Startup/shutdown baghouse air damper failed closed
9	04/07/04	4:00 PM	38	Startup/shutdown	Startup/shutdown baghouse air damper failed closed
10	04/07/04	4:06 PM	52	Startup/shutdown	Startup/shutdown baghouse air damper failed closed
11	04/07/04	4:12 PM	60	Startup/shutdown	Startup/shutdown baghouse air damper failed closed
12	04/07/04	5:24 PM	23	Startup/shutdown	Startup/shutdown air lance not turned on
13	04/07/04	5:30 PM	23	Startup/shutdown	Startup/shutdown air lance not turned on
14	04/07/04	6:42 PM	35	Startup/shutdown	Change over air lance not turned on
15	04/07/04	6:48 PM	39	Startup/shutdown	Change over air lance not turned on
16	04/07/04	7:00 PM	28	Startup/shutdown	Change over air lance not turned on
17	04/07/04	7:12 PM	26	Startup/shutdown	Change over air lance not turned on
18	04/07/04	7:18 PM	30	Startup/shutdown	Change over air lance not turned on
19	04/07/04	7:24 PM	28	Startup/shutdown	Change over air lance not turned on
20	04/07/04	7:30 PM	39	Startup/shutdown	Change over air lance not turned on
21	04/07/04	7:36 PM	22	Startup/shutdown	Change over air lance not turned on
22	04/07/04	7:48 PM	21	Startup/shutdown	Change over air lance not turned on
23	04/12/04	7:12 PM	21	Process problems	Bad coal
24	04/13/04	3:12 AM	29	Process problems	Bad coal
25	04/13/04	7:06 AM	23	Process problems	Bad coal
26	04/13/04	7:12 AM	27	Process problems	Bad coal
27	04/13/04	7:18 AM	30	Process problems	Bad coal
28	04/13/04	7:24 AM	28	Process problems	Bad coal
29	04/13/04	7:30 AM	29	Process problems	Bad coal
30	04/13/04	7:36 AM	31	Process problems	Bad coal
31	04/13/04	7:42 AM	29	Process problems	Bad coal
32	04/13/04	7:48 AM	22	Process problems	Bad coal
33	05/02/04	12:30 AM	28	Soot blowing	Soot blowing
34	05/10/04	6:48 AM	27	Soot blowing	Soot blowing
35	05/17/04	10:00 AM	49	Other known causes	Air lance broke in front of boiler
36	05/17/04	10:06 AM	28	Other known causes	Air lance broke in front of boiler
37	05/17/04	10:12 AM	37	Other known causes	Air lance broke in front of boiler
38	05/17/04	1:24 PM	28	Soot blowing	Soot blowing
39	05/18/04	6:54 AM	22	Soot blowing	Soot blowing
40	06/14/04	8:48 PM	90	Startup/shutdown	FD fan tripped on start up
41	06/14/04	8:54 PM	82	Startup/shutdown	FD fan tripped on start up
42	06/14/04	9:00 PM	82	Startup/shutdown	FD fan tripped on start up
43	06/14/04	9:06 PM	79	Startup/shutdown	FD fan tripped on start up
44	06/14/04	10:42 PM	29	Process problems	Airflow adjustments with new nozzles
45	06/14/04	10:48 PM	32	Process problems	Airflow adjustments with new nozzles
46	06/14/04	10:54 PM	25	Process problems	Airflow adjustments with new nozzles
47	06/30/04	1:36 PM	27	Process problems	Alberger rates raised and BFI increased

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
04/06/04	12:48 AM	22	No	Within emission limits	NV Start up/shutdown
04/07/04	3:30 PM	23	No	Within emission limits	NV Start up/shutdown
04/07/04	4:18 PM	22	No	Within emission limits	NV Start up/shutdown
04/07/04	5:18 PM	23	No	Within emission limits	NV Start up/shutdown
04/07/04	6:54 PM	23	No	Within emission limits	NV Start up/shutdown
04/07/04	7:06 PM	25	No	Within emission limits	NV Start up/shutdown
04/08/04	6:48 AM	24	No	Within emission limits	NV Soot blowing
04/08/04	8:36 AM	22	No	Within emission limits	NV Soot blowing
04/09/04	6:48 AM	22	No	Within emission limits	NV Soot blowing
04/09/04	5:54 PM	21	No	Within emission limits	NV Soot blowing
04/10/04	6:48 AM	24	No	Within emission limits	NV Soot blowing
04/10/04	5:54 PM	21	No	Within emission limits	NV Soot blowing
04/11/04	6:42 AM	22	No	Within emission limits	NV Soot blowing
04/12/04	6:48 AM	24	No	Within emission limits	NV Soot blowing
04/12/04	7:00 PM	23	No	Within emission limits	NV Soot blowing
04/13/04	6:54 AM	22	No	Within emission limits	NV Process Change
04/13/04	7:00 AM	22	No	Within emission limits	NV Process Change
04/13/04	8:18 AM	21	No	Within emission limits	NV Process Change
04/13/04	2:12 PM	21	No	Within emission limits	NV Process Change
04/14/04	6:54 AM	23	No	Within emission limits	NV Soot blowing
04/15/04	6:48 AM	21	No	Within emission limits	NV Soot blowing
04/16/04	6:48 AM	22	No	Within emission limits	NV Soot blowing
04/16/04	8:06 PM	23	No	Within emission limits	NV Soot blowing
04/17/04	8:54 PM	22	No	Within emission limits	NV Soot blowing
04/18/04	6:54 AM	21	No	Within emission limits	NV Soot blowing
04/19/04	12:42 AM	26	No	Within emission limits	NV Soot blowing
04/19/04	2:06 PM	21	No	Within emission limits	NV Soot blowing
04/19/04	9:06 PM	25	No	Within emission limits	NV Soot blowing
04/20/04	1:06 PM	23	No	Within emission limits	NV Soot blowing
04/20/04	7:54 PM	23	No	Within emission limits	NV Soot blowing
04/21/04	7:54 PM	23	No	Within emission limits	NV Soot blowing
04/22/04	11:42 AM	21	No	Within emission limits	NV Soot blowing
04/22/04	7:54 PM	21	No	Within emission limits	NV Soot blowing
04/23/04	7:54 AM	26	No	Within emission limits	NV Soot blowing
04/25/04	6:48 AM	24	No	Within emission limits	NV Soot blowing
04/26/04	6:47 PM	23	No	Within emission limits	NV Soot blowing
04/27/04	6:48 AM	22	No	Within emission limits	NV Soot blowing
05/03/04	7:48 PM	23	No	Within emission limits	NV Soot blowing
05/04/04	6:54 AM	21	No	Within emission limits	NV Soot blowing
05/04/04	6:48 PM	21	No	Within emission limits	NV Soot blowing
05/05/04	6:54 AM	23	No	Within emission limits	NV Soot blowing
05/06/04	8:54 AM	22	No	Within emission limits	NV Soot blowing
05/07/04	7:54 PM	23	No	Within emission limits	NV Soot blowing
05/09/04	7:54 PM	21	No	Within emission limits	NV Soot blowing
05/10/04	4:54 AM	22	No	Within emission limits	NV Soot blowing
05/12/04	1:00 AM	24	No	Within emission limits	NV Soot blowing
05/12/04	10:48 AM	22	No	Within emission limits	NV Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
05/14/04	6:54 AM	25	No	Within emission limits	NV Soot blowing
05/14/04	7:48 PM	22	No	Within emission limits	NV Soot blowing
05/15/04	6:54 AM	24	No	Within emission limits	NV Soot blowing
05/15/04	6:48 PM	22	No	Within emission limits	NV Soot blowing
05/17/04	8:42 AM	22	No	Within emission limits	NV Soot blowing
05/17/04	12:18 PM	22	No	Within emission limits	NV Soot blowing
05/17/04	1:12 PM	24	No	Within emission limits	NV Soot blowing
05/17/04	7:48 PM	21	No	Within emission limits	NV Soot blowing
05/18/04	6:48 AM	26	No	Within emission limits	NV Soot blowing
05/19/04	7:54 PM	24	No	Within emission limits	NV Soot blowing
05/21/04	6:48 AM	25	No	Within emission limits	NV Soot blowing
05/21/04	6:48 PM	25	No	Within emission limits	NV Soot blowing
05/22/04	6:48 AM	21	No	Within emission limits	NV Soot blowing
05/22/04	6:48 PM	23	No	Within emission limits	NV Soot blowing
05/24/04	8:00 PM	25	No	Within emission limits	NV Soot blowing
05/27/04	6:48 AM	23	No	Within emission limits	NV Soot blowing
05/29/04	5:00 AM	24	No	Within emission limits	NV Soot blowing
05/29/04	8:36 PM	21	No	Within emission limits	NV Soot blowing
05/31/04	7:54 PM	21	No	Within emission limits	NV Soot blowing
06/01/04	6:48 AM	21	No	Within emission limits	NV Soot blowing
06/01/04	7:54 PM	21	No	Within emission limits	NV Soot blowing
06/05/04	8:12 AM	21	No	Within emission limits	NV Start up/shutdown
06/14/04	9:12 PM	26	No	Within emission limits	NV Start up/shutdown
06/14/04	9:36 PM	28	No	Within emission limits	NV Start up/shutdown
06/14/04	10:30 PM	23	No	Within emission limits	NV Start up/shutdown
06/15/04	8:24 AM	25	No	Within emission limits	NV Start up/shutdown
06/15/04	8:30 AM	24	No	Within emission limits	NV Start up/shutdown
06/15/04	6:54 PM	22	No	Within emission limits	NV Soot blowing
06/18/04	3:30 AM	21	No	Within emission limits	NV Soot blowing
06/19/04	5:54 PM	21	No	Within emission limits	NV Soot blowing
06/22/04	2:00 PM	21	No	Within emission limits	NV Soot blowing
06/22/04	2:54 PM	25	No	Within emission limits	NV Soot blowing
06/23/04	8:48 AM	21	No	Within emission limits	NV Soot blowing
06/27/04	7:54 PM	22	No	Within emission limits	NV Soot blowing
06/28/04	6:48 AM	23	No	Within emission limits	NV Soot blowing
06/30/04	7:48 PM	21	No	Within emission limits	NV Soot blowing
06/30/04	8:48 PM	21	No	Within emission limits	NV Soot blowing



July 28, 2004

Ms. Teresa Seidel
District Supervisor
MDEQ Air Quality Division
SE Michigan District Headquarters
38980 West Seven Mile Road
Livonia, MI 48152-1006

Re: Boiler No. 10 Semi-annual Emissions Report for the 1st half of 2004

Dear Ms. Seidel:

This Semiannual Emissions Report is being submitted in accordance with the reporting requirements from the State of Michigan Renewable Operating Permit No. 199700084 Table E-01.3 EGBOILER10. Boiler No. 10 was operated using Natural Gas only during the entire reporting period. No excess emissions occurred during the semiannual reporting period of the second half of 2003.

The average NO_x and CO₂ emission rates (lb/MM Btu heat input) and the 30-day average NO_x emission rates (lb/MM Btu heat input) are summarized in Attachment A.

There was zero operating days when the 30-day average NO_x emission rate exceeded the limit under 60.44b.

Pollution data was obtained throughout the reporting period. In 3 of these days, March 30 through April 2, the boiler was down and the power was interrupted. The data has been entered as zeros because the boiler was not operating for these days.

Emission data excluded from the calculations of average emission rates and reasons for excluding data:

"F" factor is 1,040 dscf / MMBtu.

The pollutant concentrations did not exceed full span of the CEMS during the quarter.

No modifications were made to the CEM that could affect the ability of the CEMS to comply with PS 2 or 3.

Attachment B contains the daily CEMS drift test.

Attachment C contains the NO_x / CO₂ Span gas Certificate of Analysis.

If you have any questions please call me at 810-326-2841.

Sincerely,



Wade D. Richards
Powerhouse Superintendent

cc: EHS File
Don Chutas
Dan Taylor
Tom Gasloli,
MDEQ, Air Quality Division
PO Box 30260
Lansing, MI 48909

Attachments

Boiler No. 10 NO_x Daily Averages, Emission Data, 30-Day Average NO_x
Boiler No. 10 Daily Calibration (zero / span)
Certificate of Analysis / EPA Protocol Gas

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

Summary Report for Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant: NOx

Reporting period: January-June 2004

Diluent: O2

Company: Cargill Salt

Unit Description:

Boiler #10, 150,000 #/hr

Emission Limit: 0.10 #/mmBtu 30 day avg.

Total Source Operation Time

4,304 hours

Monitor Manufacturer, Model No., & Serial No.:

NOx TECO Model #42C, S/N #873662-374

CO2 CAI Model ZRH S/N A1J3876T

Emission Data Summary

1 Duration of Excess Emissions (EE) in reporting period due to:

a.	Startup/Shutdown	<u>0</u>
b.	Soot Blowing	<u>0</u>
c.	Control Equipment Problems	<u>0</u>
d.	Process Problems	<u>0</u>
e.	Other Known Causes	<u>0</u>
f.	Unknown Causes	<u>0</u>

2 Total Durations of EE's

3 Total Duration of EE's/Total Source Operation Time X 100 0 %

CEM System Summary

1 CEM system downtime in reporting period due to:

a.	Monitor Equipment Malfunctions	<u>0</u>
b.	Non-Monitor Equipment Malfunctions	<u>0</u>
c.	Quality Assurance Calibrations (Excess)	<u>0</u>
d.	Other Known Causes	<u>0</u>
e.	Unknown Causes	<u>0</u>

2 Total CEM System Downtime

3 Total CEM System Downtime/Total Source Operation Time X 100 0.0%

Comments: _____

I certify that the information contained in this report is true, accurate and complete.

Signature: 

Date: 7/29/04

Attachment A
Boiler 10 Emissions Data 30-day average NOx

Date	NOx Parts per Million	NOx Pounds per Mbtu	CO2	30-Day Average	Comments
1/1/2004	47.55	0.082	7.19	0.083	
1/2/2004	47.81	0.082	7.23	0.083	
1/3/2004	47.82	0.082	7.24	0.084	
1/4/2004	50.42	0.085	7.36	0.084	
1/5/2004	50.49	0.086	7.32	0.084	
1/6/2004	53.07	0.093	7.12	0.084	
1/7/2004	54.1	0.091	7.34	0.085	
1/8/2004	53.01	0.089	7.37	0.085	
1/9/2004	53.45	0.091	7.31	0.085	
1/10/2004	53.28	0.09	7.32	0.086	
1/11/2004	48.1	0.085	7.02	0.086	
1/12/2004	45.06	0.081	6.94	0.085	
1/13/2004	41.35	0.079	5.65	0.085	
1/14/2004	55.15	0.094	7.28	0.086	
1/15/2004	53.82	0.089	7.54	0.086	
1/16/2004	54.23	0.083	8.16	0.086	
1/17/2004	49.93	0.078	7.95	0.085	
1/18/2004	48.57	0.078	7.7	0.085	
1/19/2004	49.96	0.08	7.8	0.085	
1/20/2004	50.46	0.082	7.55	0.084	
1/21/2004	51.49	0.107	5.99	0.085	
1/22/2004	53.35	0.095	6.97	0.086	
1/23/2004	55.58	0.092	7.5	0.086	
1/24/2004	54.37	0.09	7.47	0.086	
1/25/2004	57.1	0.093	7.58	0.086	
1/26/2004	53.53	0.089	7.43	0.087	
1/27/2004	50.03	0.086	7.14	0.087	
1/28/2004	48.63	0.084	6.96	0.087	
1/29/2004	50.83	0.086	6.92	0.087	
1/30/2004	54.59	0.088	7.74	0.087	
1/31/2004	53.19	0.083	7.8	0.087	
2/1/2004	53.35	0.082	8.09	0.087	
2/2/2004	48.78	0.078	7.72	0.087	
2/3/2004	44.69	0.074	7.23	0.087	
2/4/2004	48.28	0.08	7.26	0.086	
2/5/2004	31.54	0.054	5.07	0.085	
2/6/2004	47.45	0.077	7.66	0.085	
2/7/2004	45.8	0.075	7.55	0.084	
2/8/2004	47.54	0.077	7.69	0.084	
2/9/2004	46.33	0.076	7.6	0.083	
2/10/2004	44.22	0.073	7.51	0.083	
2/11/2004	44.68	0.075	7.43	0.083	
2/12/2004	51.44	0.081	7.87	0.083	
2/13/2004	50.3	0.081	7.67	0.082	
2/14/2004	46.83	0.077	7.58	0.082	
2/15/2004	47.08	0.077	7.62	0.082	
2/16/2004	47.96	0.076	7.86	0.082	
2/17/2004	47.55	0.075	7.89	0.081	
2/18/2004	41.38	0.069	7.48	0.081	

2/19/2004	42.6	0.07	7.52	0.081	
2/20/2004	47.76	0.08	7.46	0.080	
2/21/2004	51.79	0.087	7.41	0.080	
2/22/2004	53.71	0.087	7.69	0.079	
2/23/2004	53.82	0.086	7.75	0.079	
2/24/2004	53.73	0.086	7.76	0.079	
2/25/2004	52.93	0.085	7.78	0.079	
2/26/2004	52	0.083	7.77	0.079	
2/27/2004	51.18	0.082	7.72	0.079	
2/28/2004	49.77	0.081	7.65	0.079	
2/29/2004	45.74	0.077	7.42	0.078	
3/1/2004	44.11	0.075	7.3	0.078	
3/2/2004	44.04	0.075	7.28	0.078	
3/3/2004	43.97	0.077	7.07	0.078	
3/4/2004	45.91	0.077	7.39	0.078	
3/5/2004	42.98	0.075	7.08	0.078	
3/6/2004	41.72	0.074	7	0.078	
3/7/2004	40.86	0.074	6.9	0.078	
3/8/2004	44.62	0.08	6.98	0.078	
3/9/2004	55.51	0.09	7.67	0.079	
3/10/2004	54.42	0.088	7.71	0.079	
3/11/2004	52.03	0.086	7.49	0.080	
3/12/2004	51.68	0.086	7.44	0.080	
3/13/2004	51.8	0.085	7.59	0.080	
3/14/2004	46.4	0.08	7.18	0.080	
3/15/2004	43.89	0.08	6.85	0.080	
3/16/2004	47.26	0.081	7.23	0.080	
3/17/2004	52.35	0.087	7.49	0.081	
3/18/2004	52.07	0.086	7.47	0.081	
3/19/2004	53.39	0.088	7.55	0.082	
3/20/2004	50.75	0.086	7.3	0.082	
3/21/2004	53.49	0.089	7.43	0.082	
3/22/2004	54	0.091	7.33	0.083	
3/23/2004	54.66	0.09	7.57	0.083	
3/24/2004	49.06	0.081	7.47	0.083	
3/25/2004	45.77	0.076	7.42	0.082	
3/26/2004	44.14	0.074	7.39	0.082	
3/27/2004	50.56	0.083	7.45	0.082	
3/28/2004	57.64	0.093	7.71	0.082	
3/29/2004	40.66	0.066	5.69	0.082	
3/30/2004	0.25	0	0.13	0.079	Boiler was not in operation
3/31/2004	0.25	0	0.13	0.077	Boiler was not in operation
4/1/2004	89.55	0	0.2	0.074	Boiler was not in operation
4/2/2004	49.25	0.084	6.9	0.074	
4/3/2004	57.15	0.096	7.41	0.075	
4/4/2004	58.67	0.097	7.49	0.076	
4/5/2004	57.97	0.095	7.41	0.076	
4/6/2004	56.66	0.094	7.44	0.077	
4/7/2004	51.96	0.09	7.16	0.077	
4/8/2004	45.14	0.08	7.01	0.077	
4/9/2004	44.43	0.078	7.06	0.077	
4/10/2004	42.01	0.073	7.12	0.076	
4/11/2004	40.97	0.071	7.15	0.076	

4/12/2004	41.34	0.072	7.16	0.075	
4/13/2004	40.31	0.071	7.07	0.075	
4/14/2004	39.58	0.071	6.93	0.075	
4/15/2004	40.59	0.073	6.93	0.075	
4/16/2004	39.59	0.071	6.95	0.074	
4/17/2004	36.57	0.066	6.88	0.073	
4/18/2004	35.94	0.065	6.9	0.073	
4/19/2004	36.81	0.066	6.85	0.072	
4/20/2004	39.22	0.073	6.69	0.071	
4/21/2004	36.84	0.071	6.48	0.071	
4/22/2004	41.02	0.073	6.99	0.070	
4/23/2004	40.71	0.072	7.03	0.070	
4/24/2004	40.66	0.072	7	0.070	
4/25/2004	37.45	0.068	6.78	0.069	
4/26/2004	39.01	0.071	6.76	0.069	
4/27/2004	40.76	0.073	6.87	0.068	
4/28/2004	44.23	0.082	6.71	0.069	
4/29/2004	47.59	0.08	7.35	0.072	
4/30/2004	44.17	0.075	7.28	0.074	
5/1/2004	40.02	0.071	6.98	0.076	
5/2/2004	39.84	0.071	6.93	0.076	
5/3/2004	40.98	0.076	6.73	0.075	
5/4/2004	46.02	0.08	7.18	0.075	
5/5/2004	45.48	0.079	7.18	0.074	
5/6/2004	43.48	0.075	7.2	0.074	
5/7/2004	45.42	0.077	7.29	0.073	
5/8/2004	43.18	0.075	7.18	0.073	
5/9/2004	39.98	0.07	7.09	0.073	
5/10/2004	37.13	0.065	6.88	0.073	
5/11/2004	46.59	0.079	7.27	0.073	
5/12/2004	37.57	0.067	7.01	0.073	
5/13/2004	35.11	0.063	6.93	0.072	
5/14/2004	33.34	0.061	6.78	0.072	
5/15/2004	40.03	0.073	6.83	0.072	
5/16/2004	40.77	0.073	6.98	0.072	
5/17/2004	39.21	0.069	7.09	0.072	
5/18/2004	35.46	0.064	6.79	0.072	
5/19/2004	38.28	0.072	6.68	0.072	
5/20/2004	36.07	0.064	6.99	0.072	
5/21/2004	36.98	0.066	6.94	0.072	
5/22/2004	34.28	0.062	6.83	0.072	
5/23/2004	33.87	0.063	6.7	0.071	
5/24/2004	37.64	0.071	6.62	0.071	
5/25/2004	38.85	0.071	6.82	0.071	
5/26/2004	36.06	0.067	6.71	0.071	
5/27/2004	35.04	0.067	6.54	0.071	
5/28/2004	37.63	0.076	6.2	0.071	
5/29/2004	39.69	0.073	6.73	0.071	
5/30/2004	38.13	0.071	6.67	0.070	
5/31/2004	34.9	0.067	6.46	0.070	
6/1/2004	35.02	0.067	6.48	0.070	
6/2/2004	34.76	0.07	6.15	0.070	
6/3/2004	39.42	0.07	6.97	0.070	

6/4/2004	39.28	0.071	6.9	0.069	
6/5/2004	45.63	0.08	6.67	0.069	
6/6/2004	53.52	0.089	7.43	0.070	
6/7/2004	46.01	0.077	7.4	0.070	
6/8/2004	40.94	0.069	7.38	0.070	
6/9/2004	38.31	0.064	7.39	0.070	
6/10/2004	43.07	0.072	7.45	0.070	
6/11/2004	47.52	0.079	7.48	0.070	
6/12/2004	55.17	0.089	7.68	0.071	
6/13/2004	50.14	0.081	7.71	0.072	
6/14/2004	48.12	0.076	7.85	0.072	
6/15/2004	40.09	0.066	7.4	0.071	
6/16/2004	39.16	0.068	7.19	0.071	
6/17/2004	37.57	0.066	7.03	0.071	
6/18/2004	37.11	0.066	6.99	0.071	
6/19/2004	38.76	0.07	6.87	0.071	
6/20/2004	40	0.073	6.76	0.072	
6/21/2004	38.62	0.07	6.84	0.072	
6/22/2004	37.74	0.072	6.54	0.072	
6/23/2004	40.84	0.072	7.05	0.072	
6/24/2004	39.25	0.07	6.91	0.072	
6/25/2004	39.26	0.07	6.9	0.072	
6/26/2004	40.22	0.072	6.92	0.073	
6/27/2004	40.17	0.072	6.94	0.072	
6/28/2004	37.58	0.067	6.91	0.072	
6/29/2004	36.86	0.066	6.87	0.072	
6/30/2004	35.34	0.067	6.51	0.072	

Attachment B
Boiler 10 NOx Daily Calibrations

Date	NOx Parts per Million		CO2	
	Zero	Span	Zero	Span
1/1/2004	0.12	55.87	0.16	11.4
1/2/2004	0.14	55.28	0.16	11.1
1/3/2004	0.11	55.05	0.16	10.95
1/4/2004	0.12	55.34	0.21	11.26
1/5/2004	0.13	55.34	0.19	11.06
1/6/2004	0.11	55.73	0.19	11.17
1/7/2004	0.08	56.84	0.05	11.09
1/8/2004	0.12	56.65	0.09	11.23
1/9/2004	0.1	56.72	0.07	11.24
1/10/2004	0.07	57.51	0.02	11.27
1/11/2004	0.09	56.3	0.12	11.13
1/12/2004	0.12	55.52	0.14	10.97
1/13/2004	0.12	55.08	0.12	10.89
1/14/2004	0.09	56.33	0.03	11.08
1/15/2004	0.03	55.41	0	10.91
1/16/2004	0.02	54.98	0.51	11.86
1/17/2004	0.02	54.97	0.66	11.95
1/18/2004	0.02	55.22	0.68	11.57
1/19/2004	0.02	55.01	0.52	11.56
1/20/2004	0.01	55.09	0.65	11.95
1/21/2004	0.29	55.82	0	10.01
1/22/2004	0.31	56.12	0	9.42
1/23/2004	0.37	55.14	0.18	11.33
1/24/2004	0.25	55.09	0.08	11.07
1/25/2004	0.22	55.73	0	11.28
1/26/2004	0.23	54.92	0.18	11.32
1/27/2004	0.26	53.81	0.24	11.05
1/28/2004	0	51.8	0	11.19
1/29/2004	0	52.2	0	11.2
1/30/2004	0	52.62	0	11.12
1/31/2004	0	53.15	0.18	11.55
2/1/2004	0	53.56	0.09	11.81
2/2/2004	0	53.21	0.04	11.73
2/3/2004	0	51.39	0.05	11.32
2/4/2004	0	52.46	0	11.61
2/5/2004	0	53.65	0	11.83
2/6/2004	0	51.54	0.03	11.27
2/7/2004	0	51.38	0	11.24
2/8/2004	0	53.32	0	11.55
2/9/2004	0	52.44	0	11.35
2/10/2004	0	51.66	0.01	11.37
2/11/2004	0	52.32	0	11.35
2/12/2004	0	52.11	0.04	11.5
2/13/2004	0	52.32	0	11.39
2/14/2004	0	52.14	0	11.24
2/15/2004	0	53.03	0	11.48
2/16/2004	0	53.85	0	11.7

2/17/2004	0	53.47	0.01	11.73
2/18/2004	0	52.72	0.01	11.65
2/19/2004	0	51.59	0.02	11.33
2/20/2004	-0.07	50.31	0.01	11.19
2/21/2004	0	56.26	0	10.78
2/22/2004	0	57.08	0.02	11.43
2/23/2004	0	57.51	0.02	11.52
2/24/2004	0	52.27	0.02	8.17
2/25/2004	0	58.06	0.01	11.54
2/26/2004	0	57.88	0.07	11.68
2/27/2004	0	57.79	0.02	11.63
2/28/2004	0	57.9	0.02	11.66
2/29/2004	0	57.3	0.01	11.49
3/1/2004	0	57.39	0	11.29
3/2/2004	0	56.67	0	11.01
3/3/2004	0	57.6	0	11.4
3/4/2004	0	57.64	0	11.31
3/5/2004	0	56.57	0	10.98
3/6/2004	-0.07	56.48	0	10.94
3/7/2004	0	56.16	0.01	11.12
3/8/2004	0	56.42	0.01	11.22
3/9/2004	0	57.09	0	11.29
3/10/2004	0	57.53	0.02	11.54
3/11/2004	0	56.8	0.01	11.29
3/12/2004	0	57.23	0	11.08
3/13/2004	0	58.4	0	11.42
3/14/2004	0	57.16	0.01	11.24
3/15/2004	0	56.92	0.02	11.2
3/16/2004	0	56.51	0.02	11.19
3/17/2004	0	57.1	0.01	11.13
3/18/2004	0	57.18	0.01	11.15
3/19/2004	0.32	59.29	0.23	11.24
3/20/2004	0.23	59.29	0.12	10.91
3/21/2004	0.21	59.36	0.12	10.96
3/22/2004	0.2	59.47	0.13	11.05
3/23/2004	0.23	59.09	0.15	11.05
3/24/2004	0.31	54.37	0.2	11.15
3/25/2004	0.2	54.31	0.17	11.07
3/26/2004	0.2	53.9	0.16	11.06
3/27/2004	0.19	54.31	0.14	11.14
3/28/2004	0.23	54.33	0.18	11.23
3/29/2004	0.2	53.84	0.15	11.02
3/30/2004	0.17	52.21	0.17	10.71
3/31/2004	N/A	N/A	N/A	N/A
4/1/2004	N/A	N/A	N/A	N/A
4/2/2004	N/A	N/A	N/A	N/A
4/3/2004	0.87	53.8	0.12	10.74
4/4/2004	0.55	53.66	0.12	10.79
4/5/2004	0.44	54.26	0.12	11
4/6/2004	0.41	54.13	0.12	10.94
4/7/2004	0.35	53.85	0.1	10.81

4/8/2004	0.33	53.25	0.13	10.65
4/9/2004	0.3	53.61	0.13	10.81
4/10/2004	0.28	53.14	0.12	10.9
4/11/2004	0.26	48.63	0.13	10.95
4/12/2004	0.26	49.4	0.13	11.01
4/13/2004	0.28	49.16	0.19	10.85
4/14/2004	0.26	49.63	0.13	10.82
4/15/2004	0.25	50.42	0.13	11
4/16/2004	0.25	50.58	0.14	11
4/17/2004	0.21	50.64	0.08	10.8
4/18/2004	0.22	51.08	0.1	10.92
4/19/2004	0.25	50.35	0.12	10.74
4/20/2004	0.24	51.6	0.09	10.93
4/21/2004	0.21	50.36	0.13	10.53
4/22/2004	0.2	51.71	0.12	10.87
4/23/2004	0.25	52.03	0.14	10.99
4/24/2004	0.24	52.43	0.14	11.08
4/25/2004	0.21	51.71	0.14	10.82
4/26/2004	0.2	52.01	0.11	10.78
4/27/2004	0.23	51.88	0.1	10.67
4/28/2004	0.23	52.2	0.16	10.9
4/29/2004	0.21	52.66	0.14	10.88
4/30/2004	0.21	52.52	0.1	10.9
5/1/2004	0.2	52.28	0.1	10.7
5/2/2004	0.23	52.3	0.15	10.79
5/3/2004	0.23	52.74	0.14	10.92
5/4/2004	0.24	53.18	0.12	10.94
5/5/2004	0.22	52.73	0.13	10.8
5/6/2004	0.21	52.95	0.14	10.88
5/7/2004	0.22	53.38	0.11	10.99
5/8/2004	0.23	53.42	0.14	11.07
5/9/2004	0.22	53.07	0.11	10.89
5/10/2004	0.21	53.07	0.1	10.81
5/11/2004	0.07	55.01	0.04	11.01
5/12/2004	0.25	54.47	0.07	10.91
5/13/2004	0.15	54.4	0.1	11.09
5/14/2004	0.07	54.12	0.07	10.99
5/15/2004	0.02	55.31	0	10.87
5/16/2004	0.01	56.07	0.01	11.04
5/17/2004	0.02	55.9	0.01	11.03
5/18/2004	0.03	51.05	0.07	10.94
5/19/2004	0.01	51.77	0	10.87
5/20/2004	0.02	52.07	0	10.83
5/21/2004	0.01	52.32	0	10.89
5/22/2004	0.01	51.37	0.02	10.82
5/23/2004	0.02	51.37	0.04	10.77
5/24/2004	0.02	51.55	0.05	10.66
5/25/2004	0.01	52.38	0	10.74
5/26/2004	0.01	52.11	0.06	10.71
5/27/2004	0.01	52.24	0	10.58
5/28/2004	0.01	51.9	0.04	10.64

5/29/2004	0.01	53.42	0	10.88
5/30/2004	0.01	52.75	0.03	10.89
5/31/2004	0.02	51.8	0.05	10.57
6/1/2004	0.01	52.08	0.01	10.5
6/2/2004	0.02	52.11	0.05	10.67
6/3/2004	0.01	53.64	0	10.9
6/4/2004	0.01	53.82	0	11.01
6/5/2004	0.01	53.44	0	10.92
6/6/2004	0.03	53.56	0.01	10.95
6/7/2004	0.03	53.32	0.05	11.04
6/8/2004	0.02	53.58	0.02	10.99
6/9/2004	0.02	53.29	0.05	11
6/10/2004	0.03	53.26	0.11	11.04
6/11/2004	0.02	53.24	0.05	10.92
6/12/2004	0.02	53.82	0.05	11.07
6/13/2004	0.03	53.27	0.05	10.97
6/14/2004	0.03	53.33	0.04	10.9
6/15/2004	0.02	53.37	0.12	11.03
6/16/2004	0.03	53.44	0.09	11.11
6/17/2004	0.03	53.19	0.09	10.96
6/18/2004	0.02	53.31	0.07	10.95
6/19/2004	0.02	53.41	0.06	11.03
6/20/2004	0.01	53.96	0	10.84
6/21/2004	0.02	53.05	0.03	10.83
6/22/2004	0.02	52.15	0.04	10.59
6/23/2004	0.03	53.27	0.03	10.92
6/24/2004	0.04	52.89	0.05	10.84
6/25/2004	0.03	53.88	0.01	10.97
6/26/2004	0.03	53.47	0.02	10.93
6/27/2004	0.03	53.65	0.02	10.98
6/28/2004	0.05	53.5	0.06	11
6/29/2004	0.04	53.64	0.04	10.98
6/30/2004	0.03	53.45	0.05	10.98



Praxair Distribution, Inc.
145 Shimersville Road
Bethlehem, PA 18015

Installed 01/21/04

Tel: (610) 691-2474
Fax: (610) 758-9103

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER PRAXAIR DETROIT

P.O NUMBER 315123-1

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
NITRIC OXIDE 75.6PPM GMIS VS	1684B	CAL-013591	97.8PPM
11.11% CARBON DIOXIDE GMIS VS	2745	CAL-010433	15.69%

ANALYZER READINGS

R=REFERENCE STANDARD

Z=ZERO GAS

C=GAS CANDIDATE

1. COMPONENT	NITRIC OXIDE 75.6PPM GMIS VS	ANALYZER MAKE-MODEL-S/N	TECO MODEL 42C 42CH-57352-312
ANALYTICAL PRINCIPLE	Chemiluminescence	LAST CALIBRATION DATE	11/30/03
FIRST ANALYSIS DATE	12/16/03	SECOND ANALYSIS DATE	12/23/03
Z 0.0	R 75.5	C 54.6	CONC. 54.6
R 75.6	Z 0.0	C 54.6	CONC. 54.6
Z 0.0	C 54.6	R 75.5	CONC. 54.6
U/M PPM	MEAN TEST ASSAY	54.6	U/M PPM
2. COMPONENT	11.11% CARBON DIOXIDE GMIS VS	ANALYZER MAKE-MODEL-S/N	HORIBA VIA 510, S/N 576979023
ANALYTICAL PRINCIPLE	NON-DISPERSIVE INFRARED	LAST CALIBRATION DATE	11/30/03
FIRST ANALYSIS DATE	12/16/03	SECOND ANALYSIS DATE	
Z 0.00	R 11.11	C 10.92	CONC. 10.95
R 11.08	Z 0.00	C 10.90	CONC. 10.93
Z 0.00	C 10.90	R 11.05	CONC. 10.93
U/M %	MEAN TEST ASSAY	10.94	U/M %

VALUES NOT VALID BELOW 150 PSIG; BALANCE: NITROGEN

UNCERTAINTIES: NO₂ ± 0.5PPM, CO₂ ± 0.06%

THIS CYLINDER NO. SA19129
HAS BEEN CERTIFIED ACCORDING TO SECTION 2.2
OF TRACEABILITY PROTOCOL NO. EPA-600/R97/121
PROCEDURE G1
CERTIFIED ACCURACY ± 1 % NIST TRACEABLE
CYLINDER PRESSURE 2000 PSIG
CERTIFICATION DATE 12/23/03
EXPIRATION DATE 12/23/05 TERM

CERTIFIED CONCENTRATION
NITRIC OXIDE 54.6PPM
CARBON DIOXIDE 10.94%
NITROGEN BALANCE
NOx (FOR REFERENCE ONLY) 54.6PPM

ANALYZED BY

JOSH FINCKE

CERTIFIED BY *GF* 12-29-03



Praxair Distribution, Inc.
45 Shimersville Road
Bethlehem, PA 18015
Tel (610) 691-2474
Fax (610) 758-9103

Installed 07/28/03

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER PRAXAIR: DETROIT

P.O NUMBER 847359-00

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
NITRIC OXIDE 75.6 PPM GMIS VS.	1684B	CAL-013591	97.8 PPM
18.19% CARBON DIOXIDE GMIS VS.	2745	CAL-010471	15.69%

ANALYZER READINGS

R=REFERENCE STANDARD

Z=ZERO GAS

C=GAS CANDIDATE

1. COMPONENT	NITRIC OXIDE 75.6 PPM GMIS VS.	ANALYZER MAKE-MODEL-S/N	TECO MODEL 42C 42CHL-55533-304
ANALYTICAL PRINCIPLE	CHEMILUMINESCENCE	LAST CALIBRATION DATE	04/30/02
FIRST ANALYSIS DATE	05/14/02	SECOND ANALYSIS DATE	05/21/02
Z 0	R 75.6	C 54.3	CONC. 54.3
R 75.7	Z 0	C 54.4	CONC. 54.4
Z 0	C 54.2	R 75.6	CONC. 54.2
U/M PPM	MEAN TEST ASSAY	54.3	U/M PPM
2. COMPONENT	18.19% CARBON DIOXIDE GMIS VS.	ANALYZER MAKE-MODEL-S/N	SIEMENS ULTRAMAT 5E SN: D2-412
ANALYTICAL PRINCIPLE	NON-DISPERSIVE INFRARED	LAST CALIBRATION DATE	04/30/02
FIRST ANALYSIS DATE	05/14/02	SECOND ANALYSIS DATE	
Z 0	R 18.16	C 11.12	CONC. 11.11
R 18.16	Z 0	C 11.12	CONC. 11.11
Z 0	C 11.12	R 18.16	CONC. 11.11
U/M %	MEAN TEST ASSAY	11.11	U/M %

VALUES NOT VALID BELOW 150 PSIG; BALANCE:NITROGEN
UNCERTAINTIES: NO:±0.4PPM, CO2:±0.06%

THIS CYLINDER NO. SA4440
HAS BEEN CERTIFIED ACCORDING TO SECTION 2.2
OF TRACEABILITY PROTOCOL NO. EPA-600/R97/121
PROCEDURE G1
CERTIFIED ACCURACY ± 1 % NIST TRACEABLE
CYLINDER PRESSURE 2000 PSIG
CERTIFICATION DATE 05/21/02
EXPIRATION DATE 05/21/04 TERM

CERTIFIED CONCENTRATION
NITRIC OXIDE 54.3PPM
CARBON DIOXIDE 11.11%
NITROGEN BALANCE
NOx (FOR REFERENCE ONLY) 54.3PPM

ANALYZED BY

JENNIFER MORYKIN

CERTIFIED BY

KEVIN BRADY



JV

January 20, 2005

Ms. Teresa Seidel
District Supervisor
MDEQ Air Quality Division
SE Michigan District Headquarters
38980 West Seven Mile Road
Livonia, MI 48152-1006

JAN 20 2005

Re: Boiler No. 5 Quarterly Excess Emissions Report (EER) for Opacity for the 4th quarter 2004
Boiler #10 hours of operation for 2nd half of 2004

Dear Ms. Seidel:

#10 Boiler operated for 130,153 minutes or 2169 hours and 13 minutes for the 2nd half of 2004.

This EER is being submitted in accordance with the quarterly reporting requirements of 40 CFR 60.7(c) and (d). Attached is a summary utilizing MDEQ's report form based on the format required by 40 CFR 60.7(d).

During the 4th quarter, Boiler No. 5 operated within the opacity emission 99.91% of the boiler operating time. To put this compliance rate in perspective, we take note of the fact that 40 CFR 60.7(d) only requires the submission of more than the summary report when the source is in compliance less than 99% of the time. Attached in Table 1 is a list of exceedences including time, duration, and reason for the exceedence.

Consistent with our consent agreement, a listing of time, duration, and cause of each six-minute average greater than 20% is attached in Table 2. Note that not all readings greater than 20% constitute an exceedence as defined by MDEQ Rule 301.

Cargill had one unscheduled shutdowns this quarter. Cargill Salt, St. Clair has identified three main causes for the six-minute opacity averages in exceedence of MDEQ Rule 301. See Table 1. They are listed below along with the corrective actions and preventative measures. The summary below also includes the percentage of the total exceedences caused by the particular problem.

On October 12, 2004 1:59 PM until October 13 1, 2004 9:11 AM the Data Acquisition System (DAS) was not collecting data. A fire main was struck with a forklift and water in the area made it unsafe to operate the computer, which supports the DAS. The electricity was disconnected until the area was determined to be dry. The problem was corrected and the power restored as quickly as possible without putting anyone's safety in further jeopardy.

<u>Cause</u>	<u>Corrective Action Taken or Preventative Measure Adopted</u>
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Process problems
(55%) 11 Occurrences

Five occurrences came from wet coal. We had wet coal during a two day period in October. The coal was wet from the rain during this week.

Three occurrences happened when we ran the boiler at very low rate. We were running at the lowest rate possible and had to adjust the airflow. We worked with fan speed, and stoker speed controls to maintain our opacity.

One occurrence happened when the co-fire was shut down from a soot blowing occurrence.

One process occurrence was attributed to clinkers falling off of the back wall and blocking the air in the front of the boiler. The practice of monitoring the build-up on the back wall and knocking them down while they are small has reduced this type of event.

One exceedance was caused when we bypassed the economizer. The reason to bypass the economizer was to repair an external leak. This practice is done very infrequently.

Soot blowing
(35%) 7 Occurrences

There were 7 soot-blowing exceedances.

Startup/shutdown
(10%) 2 Occurrences

We had one exceedance each when we lit the coal during startup and one exceedance when we changed the power from Detroit Edison to Cargill's AC generator.

If you have any questions please call me at 810-326-2841.

Sincerely,



Wade D. Richards
Powerhouse Superintendent

cc: Don Chutas
EHS File

Tom Gasloli,
MDEQ, Air Quality Division
PO Box 30260
Lansing, MI 48909

Attachments

Michigan Department of Environmental Quality Air Quality Division Summary #5 Boiler
Table 1 – Opacity Excursions
Table 2 – 6 minute Opacity Readings > 20% (excluding opacity excursions listed in Table 1)

Table 1 - OPACITY EXCURSIONS

Number	Date	Time	Boiler 5 Opacity	Comment	Comment Detail
1	10/04/04	7:47 AM	21	Soot blowing	Soot blowing
2	10/14/04	5:47 AM	31	Process problems	Co-fire tripped on soot blowing
3	10/22/04	6:17 AM	32	Process problems	Clinker fell of back wall
4	10/29/04	5:47 AM	28	Soot blowing	Soot blowing
5	10/29/04	4:53 PM	24	Process problems	Wet coal
6	10/29/04	5:53 PM	21	Process problems	Wet coal
7	10/29/04	7:05 PM	36	Process problems	Fire in stoker from wet coal
8	10/30/04	5:53 AM	36	Process problems	Wet coal
9	10/30/04	6:47 AM	30	Process problems	Wet coal
10	11/4/04	7:47 AM	28	Soot blowing	Soot blowing
11	11/7/04	5:47 AM	32	Soot blowing	Soot blowing
12	11/8/04	7:53 PM	28	Soot blowing	Soot blowing
13	11/22/04	2:11 PM	29	Process problems	Isolating economizer for external leak
14	11/24/04	7:47 AM	28	Soot blowing	Soot blowing
15	12/10/04	7:59 PM	30	Soot blowing	Soot blowing
16	12/24/04	3:59 PM	21	Process problems	Switched from slow forced draft fan
17	12/24/04	4:41 PM	21	Process problems	Establishing lowest rate on #5 boiler
18	12/24/04	4:47 PM	22	Process problems	Establishing lowest rate on #5 boiler
19	12/26/04	7:05 PM	43	Startup/shutdown	Lighting coal in #5 boiler
20	12/27/04	11:47 AM	36	Startup/shutdown	Power change over from Detroit Edison to Cargill

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
10/01/04	6:47 PM	22	No	Within emission limits	Soot blowing
10/01/04	7:47 PM	21	No	Within emission limits	Soot blowing
10/02/04	6:41 AM	21	No	Within emission limits	Soot blowing
10/02/04	7:41 AM	21	No	Within emission limits	Soot blowing
10/02/04	6:53 PM	22	No	Within emission limits	Soot blowing
10/03/04	5:53 PM	23	No	Within emission limits	Soot blowing
10/03/04	7:53 PM	23	No	Within emission limits	Soot blowing
10/04/04	6:41 AM	22	No	Within emission limits	Soot blowing
10/04/04	7:42 AM	22	No	Within emission limits	Soot blowing
10/04/04	7:47 PM	21	No	Within emission limits	Soot blowing
10/05/04	6:47 AM	21	No	Within emission limits	Soot blowing
10/06/04	6:47 AM	22	No	Within emission limits	Soot blowing
10/06/04	3:11 PM	21	No	Within emission limits	Wrong key entered in Small PRV
10/06/04	5:53 PM	22	No	Within emission limits	Soot blowing
10/06/04	7:41 PM	21	No	Within emission limits	Soot blowing
10/07/04	6:47 AM	21	No	Within emission limits	Soot blowing
10/07/04	5:47 PM	21	No	Within emission limits	Soot blowing
10/08/04	6:47 AM	26	No	Within emission limits	Soot blowing
10/08/04	7:47 AM	24	No	Within emission limits	Soot blowing
10/08/04	5:47 PM	21	No	Within emission limits	Soot blowing
10/08/04	6:47 PM	21	No	Within emission limits	Soot blowing
10/09/04	7:41 AM	24	No	Within emission limits	Soot blowing
10/09/04	6:47 PM	22	No	Within emission limits	Soot blowing
10/09/04	7:47 PM	22	No	Within emission limits	Soot blowing
10/10/04	6:47 AM	24	No	Within emission limits	Soot blowing
10/10/04	7:53 AM	21	No	Within emission limits	Soot blowing
10/10/04	6:47 PM	21	No	Within emission limits	Soot blowing
10/10/04	7:47 PM	23	No	Within emission limits	Soot blowing
10/11/04	6:47 AM	25	No	Within emission limits	Soot blowing
10/11/04	7:47 AM	25	No	Within emission limits	Soot blowing
10/11/04	6:47 PM	23	No	Within emission limits	Soot blowing
10/11/04	7:47 PM	24	No	Within emission limits	Soot blowing
10/12/04	5:47 AM	22	No	Within emission limits	Soot blowing
10/12/04	6:47 AM	25	No	Within emission limits	Soot blowing
10/12/04	7:53 AM	25	No	Within emission limits	Soot blowing
10/13/04	5:47 PM	22	No	Within emission limits	Soot blowing
10/13/04	7:47 PM	22	No	Within emission limits	Soot blowing
10/14/04	6:47 AM	21	No	Within emission limits	Soot blowing
10/14/04	5:53 PM	23	No	Within emission limits	Soot blowing
10/14/04	6:59 PM	23	No	Within emission limits	Soot blowing
10/15/04	5:53 AM	22	No	Within emission limits	Soot blowing
10/15/04	5:53 PM	21	No	Within emission limits	Soot blowing
10/15/04	6:59 PM	22	No	Within emission limits	Soot blowing
10/17/04	6:47 AM	22	No	Within emission limits	Soot blowing
10/17/04	10:59 AM	25	No	Within emission limits	Removing clinker from front of boiler
10/17/04	11:11 AM	23	No	Within emission limits	Removing clinker from front of boiler
10/18/04	6:47 AM	23	No	Within emission limits	Soot blowing
10/19/04	8:53 PM	23	No	Within emission limits	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
10/20/04	6:41 AM	22	No	Within emission limits	Soot blowing
10/20/04	8:53 AM	23	No	Within emission limits	Soot blowing
10/20/04	7:57 PM	22	No	Within emission limits	Soot blowing
10/20/04	8:47 PM	22	No	Within emission limits	Soot blowing
10/21/04	7:41 AM	26	No	Within emission limits	Soot blowing
10/21/04	8:41 AM	21	No	Within emission limits	Soot blowing
10/22/04	5:53 AM	26	No	Within emission limits	Soot blowing
10/22/04	6:23 AM	21	No	Within emission limits	Soot blowing
10/22/04	7:41 AM	27	No	Within emission limits	Soot blowing
10/22/04	10:41 AM	21	No	Within emission limits	Baghouse booster fan down
10/22/04	2:47 PM	24	No	Within emission limits	Soot blowing
10/22/04	5:47 PM	23	No	Within emission limits	Soot blowing
10/22/04	6:47 PM	24	No	Within emission limits	Soot blowing
10/23/04	6:47 AM	24	No	Within emission limits	Soot blowing
10/23/04	7:47 AM	23	No	Within emission limits	Soot blowing
10/23/04	5:47 PM	23	No	Within emission limits	Soot blowing
10/23/04	6:41 PM	22	No	Within emission limits	Soot blowing
10/24/04	5:47 AM	21	No	Within emission limits	Soot blowing
10/24/04	6:41 AM	25	No	Within emission limits	Soot blowing
10/24/04	7:41 AM	21	No	Within emission limits	Soot blowing
10/25/04	5:47 AM	25	No	Within emission limits	Soot blowing
10/25/04	7:53 AM	21	No	Within emission limits	Soot blowing
10/25/04	6:47 PM	23	No	Within emission limits	Soot blowing
10/25/04	7:47 PM	22	No	Within emission limits	Soot blowing
10/26/04	5:53 AM	23	No	Within emission limits	Soot blowing
10/26/04	7:47 AM	22	No	Within emission limits	Soot blowing
10/27/04	6:47 PM	21	No	Within emission limits	Soot blowing
10/27/04	7:47 PM	21	No	Within emission limits	Soot blowing
10/28/04	6:47 PM	21	No	Within emission limits	Soot blowing
10/28/04	7:47 PM	22	No	Within emission limits	Soot blowing
10/29/04	4:47 PM	22	No	Within emission limits	Soot blowing
10/29/04	5:17 PM	23	No	Within emission limits	Soot blowing
10/29/04	9:47 PM	22	No	Within emission limits	Soot blowing
10/30/04	7:47 AM	25	No	Within emission limits	Soot blowing
10/30/04	5:47 PM	23	No	Within emission limits	Soot blowing
10/30/04	6:53 PM	22	No	Within emission limits	Soot blowing
10/30/04	7:47 PM	22	No	Within emission limits	Soot blowing
10/31/04	6:41 AM	21	No	Within emission limits	Soot blowing
10/31/04	7:47 AM	25	No	Within emission limits	Soot blowing
10/31/04	5:53 PM	22	No	Within emission limits	Soot blowing
10/31/04	7:47 PM	23	No	Within emission limits	Soot blowing
10/31/04	8:11 PM	27	No	Within emission limits	Soot blowing
11/1/04	6:41 AM	21	No	Within emission limits	Soot blowing
11/1/04	7:41 AM	27	No	Within emission limits	Soot blowing
11/1/04	5:47 PM	21	No	Within emission limits	Soot blowing
11/1/04	6:53 PM	21	No	Within emission limits	Soot blowing
11/1/04	7:53 PM	23	No	Within emission limits	Soot blowing
11/2/04	6:47 AM	21	No	Within emission limits	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
11/2/04	6:47 PM	21	No	Within emission limits	Soot blowing
11/2/04	7:47 PM	22	No	Within emission limits	Soot blowing
11/3/04	6:41 AM	24	No	Within emission limits	Soot blowing
11/3/04	7:47 AM	25	No	Within emission limits	Soot blowing
11/3/04	8:47 AM	24	No	Within emission limits	Soot blowing
11/3/04	6:47 PM	21	No	Within emission limits	Soot blowing
11/3/04	7:47 PM	21	No	Within emission limits	Soot blowing
11/4/04	6:47 AM	23	No	Within emission limits	Soot blowing
11/4/04	1:23 PM	22	No	Within emission limits	Soot blowing
11/4/04	6:47 PM	23	No	Within emission limits	Soot blowing
11/4/04	7:47 PM	22	No	Within emission limits	Soot blowing
11/6/04	5:47 AM	23	No	Within emission limits	Soot blowing
11/6/04	6:47 AM	23	No	Within emission limits	Soot blowing
11/6/04	7:47 AM	22	No	Within emission limits	Soot blowing
11/6/04	5:47 PM	22	No	Within emission limits	Soot blowing
11/6/04	7:47 PM	21	No	Within emission limits	Soot blowing
11/6/04	8:47 PM	22	No	Within emission limits	Soot blowing
11/7/04	6:47 AM	25	No	Within emission limits	Soot blowing
11/7/04	5:47 PM	23	No	Within emission limits	Soot blowing
11/7/04	6:47 PM	22	No	Within emission limits	Soot blowing
11/7/04	7:47 PM	21	No	Within emission limits	Soot blowing
11/8/04	5:47 AM	21	No	Within emission limits	Soot blowing
11/8/04	6:41 AM	26	No	Within emission limits	Soot blowing
11/8/04	7:41 AM	24	No	Within emission limits	Soot blowing
11/8/04	5:47 PM	22	No	Within emission limits	Soot blowing
11/9/04	7:47 AM	21	No	Within emission limits	Soot blowing
11/9/04	5:59 PM	21	No	Within emission limits	Soot blowing
11/9/04	7:47 AM	21	No	Within emission limits	Soot blowing
11/10/04	5:17 PM	24	No	Within emission limits	Sight glass off line
11/10/04	8:53 PM	22	No	Within emission limits	Soot blowing
11/11/04	7:47 AM	21	No	Within emission limits	Soot blowing
11/11/04	7:53 PM	21	No	Within emission limits	Soot blowing
11/12/04	2:41 PM	21	No	Within emission limits	Soot blowing
11/12/04	7:53 PM	22	No	Within emission limits	Soot blowing
11/13/04	8:47 AM	22	No	Within emission limits	Soot blowing
11/15/04	6:41 AM	22	No	Within emission limits	Soot blowing
11/15/04	7:47 AM	22	No	Within emission limits	Soot blowing
11/16/04	6:47 AM	24	No	Within emission limits	Soot blowing
11/16/04	8:41 AM	23	No	Within emission limits	Soot blowing
11/17/04	6:47 PM	21	No	Within emission limits	Soot blowing
11/17/04	7:53 PM	21	No	Within emission limits	Soot blowing
11/18/04	4:59 PM	21	No	Within emission limits	Soot blowing
11/18/04	6:47 PM	22	No	Within emission limits	Soot blowing
11/19/04	6:47 AM	24	No	Within emission limits	Soot blowing
11/19/04	7:47 AM	24	No	Within emission limits	Soot blowing
11/20/04	7:47 AM	24	No	Within emission limits	Soot blowing
11/20/04	8:47 AM	23	No	Within emission limits	Soot blowing
11/21/04	7:47 AM	24	No	Within emission limits	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
11/22/04	9:47 AM	23	No	Within emission limits	Soot blowing
11/22/04	9:47 PM	26	No	Within emission limits	Soot blowing
11/23/04	7:47 AM	21	No	Within emission limits	Soot blowing
11/24/04	6:47 AM	23	No	Within emission limits	Soot blowing
11/24/04	8:47 AM	23	No	Within emission limits	Soot blowing
11/24/04	9:47 PM	21	No	Within emission limits	Soot blowing
11/26/04	8:47 AM	22	No	Within emission limits	Soot blowing
11/28/04	6:41 AM	21	No	Within emission limits	Soot blowing
11/28/04	5:47 PM	21	No	Within emission limits	Soot blowing
11/29/04	5:53 AM	21	No	Within emission limits	Soot blowing
11/29/04	6:41 AM	22	No	Within emission limits	Soot blowing
11/30/04	6:53 AM	22	No	Within emission limits	Soot blowing
11/30/04	10:53 AM	23	No	Within emission limits	Detroit Edison power surge
12/1/04	7:47 AM	21	No	Within emission limits	Soot blowing
12/1/04	12:17 PM	21	No	Within emission limits	Soot blowing
12/2/04	5:53 AM	22	No	Within emission limits	Soot blowing
12/2/04	6:47 AM	24	No	Within emission limits	Soot blowing
12/2/04	7:41 AM	21	No	Within emission limits	Soot blowing
12/2/04	10:53 PM	23	No	Within emission limits	Soot blowing
12/3/04	7:48 AM	27	No	Within emission limits	Soot blowing
12/4/04	5:47 PM	21	No	Within emission limits	Soot blowing
12/5/04	8:17 PM	21	No	Within emission limits	Soot blowing
12/8/04	6:47 AM	25	No	Within emission limits	Soot blowing
12/8/04	5:47 PM	22	No	Within emission limits	Soot blowing
12/9/04	6:41 AM	21	No	Within emission limits	Soot blowing
12/9/04	7:53 PM	21	No	Within emission limits	Soot blowing
12/10/04	5:53 AM	21	No	Within emission limits	Soot blowing
12/10/04	6:53 AM	23	No	Within emission limits	Soot blowing
12/10/04	7:47 AM	22	No	Within emission limits	Soot blowing
12/10/04	5:47 PM	25	No	Within emission limits	Soot blowing
12/10/04	6:53 PM	22	No	Within emission limits	Soot blowing
12/11/04	5:53 AM	23	No	Within emission limits	Soot blowing
12/11/04	5:47 PM	25	No	Within emission limits	Soot blowing
12/11/04	6:53 PM	25	No	Within emission limits	Soot blowing
12/13/04	6:47 AM	21	No	Within emission limits	Soot blowing
12/15/04	5:53 AM	21	No	Within emission limits	Soot blowing
12/16/04	7:41 AM	23	No	Within emission limits	Soot blowing
12/16/04	8:41 AM	22	No	Within emission limits	Soot blowing
12/17/04	5:47 AM	22	No	Within emission limits	Soot blowing
12/17/04	7:41 AM	23	No	Within emission limits	Soot blowing
12/18/04	5:47 AM	23	No	Within emission limits	Soot blowing
12/18/04	6:47 AM	24	No	Within emission limits	Soot blowing
12/18/04	7:47 AM	22	No	Within emission limits	Soot blowing
12/19/04	6:47 AM	22	No	Within emission limits	Soot blowing
12/22/04	7:47 PM	22	No	Within emission limits	Soot blowing
12/24/04	7:53 AM	21	No	Within emission limits	Soot blowing
12/24/04	9:41 AM	21	No	Within emission limits	Taking #10 boiler off line
12/24/04	3:53 PM	22	No	Within emission limits	Switch to slow forced draft fan

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
12/24/04	4:05 PM	22	No	Within emission limits	Switched back to fast forced draft fan
12/26/04	1:29 PM	23	No	Within emission limits	Induced draft fan started to light co-fire
12/27/04	2:17 AM	23	No	Within emission limits	Co-fire tripped
12/27/04	6:53 PM	22	No	Within emission limits	Soot blowing
12/28/04	7:47 PM	22	No	Within emission limits	Soot blowing
12/30/04	5:53 PM	21	No	Within emission limits	Soot blowing

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

Summary Report for Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant: Opacity Reporting period: Fourth quarter, 2004

Company: Cargill Salt Unit Description: Boiler #5, 100,000 #/hour

Emission Limit: R336.1301 (1) Total Source Operation Time 131040 min

Monitor Manufacturer, Model No., & Serial No.: Durag DR 90, #403074

Emission Data Summary

1	Duration of Excess Emissions (EE) in reporting period due to:	
a.	Startup/Shutdown	<u>12</u>
b.	Soot Blowing	<u>42</u>
c.	Control Equipment Problems	<u>0</u>
d.	Process Problems	<u>66</u>
e.	Other Known Causes	<u>0</u>
f.	Unknown Causes	<u>0</u>
2	Total Durations of EE's	<u>120</u>
3	Total Duration of EE's/Total Source Operation Time X 100	<u>0.09 %</u>

CEM System Summary

1	CEM system downtime in reporting period due to:	
a.	Monitor Equipment Malfunctions	<u>0</u>
b.	Non-Monitor Equipment Malfunctions	<u>0</u>
c.	Quality Assurance Calibrations (Excess)	<u>24</u>
d.	Other Known Causes	<u>1152</u>
e.	Unknown Causes	<u>0</u>
2	Total CEM System Downtime	<u>1176</u>
3	Total CEM System Downtime/Total Source Operation Time X 100	<u>0.90 %</u>

Comments: _____

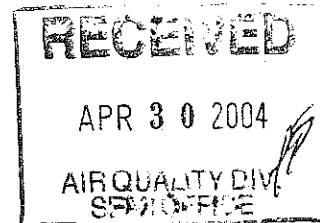
I certify that the information contained in this report is true, accurate and complete.

Signature: 

Date: 1/24/05



orange
MS



April 28, 2004

Ms. Teresa Seidel
District Supervisor
MDEQ Air Quality Division
SE Michigan District Headquarters
38980 West Seven Mile Road
Livonia, MI 48152-1006

Re: Boiler No. 5 Quarterly Excess Emissions Report (EER) for Opacity for the 1st quarter 2004

Dear Ms. Seidel:

This EER is being submitted in accordance with the quarterly reporting requirements of 40 CFR 60.7(c) and (d). Attached is a summary utilizing MDEQ's report form based on the format required by 40 CFR 60.7(d).

During the 4th quarter, Boiler No. 5 operated within the opacity emission 99.92% of the boiler operating time. To put this compliance rate in perspective, we take note of the fact that 40 CFR 60.7(d) only requires the submission of more than the summary report when the source is in compliance less than 99% of the time. Attached in Table 1 is a list of exceedences including time, duration, and reason for the exceedence.

Consistent with our consent agreement, a listing of time, duration, and cause of each six-minute average greater than 20% is attached in Table 2. Note that not all readings greater than 20% constitute an exceedence as defined by MDEQ Rule 301.

Cargill had one scheduled shutdown this quarter. Cargill Salt, St. Clair has identified (five) main causes for the six-minute opacity averages in exceedence of MDEQ Rule 301. See Table 1. They are listed below along with the corrective actions and preventative measures. The summary below also includes the percentage of the total exceedences caused by the particular problem.

Cause

Corrective Action Taken or Preventative Measure Adopted

Other Known Causes
(50%)

Six exceedences were from frozen coal and ice feeding the boiler.

Three exceedences were due to replacement of a worn Stoker air box while the boiler was operating.

One exceedence was caused when a clinker fell off the back wall.

Soot blowing
(35%)

The 7 soot-blowing exceedences was a decrease from 15 in the 4th quarter of 2003.

Process problems
(15%)

Three exceedences were attributed to Process problems. Airflow adjustments were being made on #10 boiler to maximize efficiency, which resulted in a few dramatic swings in steam pressure.

If you have any questions please call me at 810-326-2841.

Sincerely,



Wade D. Richards
Powerhouse Superintendent

cc: Don Chutas
EHS File

Tom Gasloli,
MDEQ, Air Quality Division
PO Box 30260
Lansing, MI 48909

Attachments

Michigan Department of Environmental Quality Air Quality Division Summary #5 Boiler
Table 1 - Opacity Excursions
Table 2 - 6 minute Opacity Readings - 20% (excluding opacity excursions listed in Table 1)

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

Summary Report for Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant: Opacity Reporting period: First quarter, 2004

Company: Cargill Salt Unit Description: Boiler #5, 100,000 #/hour

Emission Limit: R336.1301 (1) Total Source Operation Time 124740 min

Monitor Manufacturer, Model No., & Serial No.: Durag DR 90, #403074

Emission Data Summary

1	Duration of Excess Emissions (EE) in reporting period due to:	
a.	Startup/Shutdown	<u>0</u>
b.	Soot Blowing	<u>7</u>
c.	Control Equipment Problems	<u>0</u>
d.	Process Problems	<u>3</u>
e.	Other Known Causes	<u>10</u>
f.	Unknown Causes	<u>0</u>
2	Total Durations of EE's	<u>120</u>
3	Total Duration of EE's/Total Source Operation Time X 100	<u>0.10 %</u>

CEM System Summary

1	CEM system downtime in reporting period due to:	
a.	Monitor Equipment Malfunctions	<u>0</u>
b.	Non-Monitor Equipment Malfunctions	<u>0</u>
c.	Quality Assurance Calibrations (Excess)	<u>10</u>
d.	Other Known Causes	<u>0</u>
e.	Unknown Causes	<u>0</u>
2	Total CEM System Downtime	<u>60</u>
3	Total CEM System Downtime/Total Source Operation Time X 100	<u>0.05 %</u>

Comments: _____

I certify that the information contained in this report is true, accurate and complete.

Signature: 

Date: 4/28/04

Table 1 - OPACITY EXCURSIONS

Number	Date	Time	Boiler 5 Opacity	Comment	Comment Detail
1	1/18/04	4:12 AM	24	Other Known Causes	Frozen coal, and ice
2	1/28/04	8:36 PM	42	Other Known Causes	Frozen coal, and ice
3	1/28/04	8:42 PM	35	Other Known Causes	Frozen coal, and ice
4	1/28/04	9:48 PM	36	Other Known Causes	Frozen coal, and ice
5	1/29/04	9:00 PM	30	Other Known Causes	Frozen coal, and ice
6	1/30/04	3:42 AM	34	Other Known Causes	Frozen coal, and ice
7	2/3/04	6:48 AM	25	Process Problems	Adjusting air flows on #10 boiler
8	2/3/04	6:54 AM	21	Process Problems	Adjusting air flows on #10 boiler
9	2/3/04	7:06 AM	25	Process Problems	Adjusting air flows on #10 boiler
10	2/6/04	9:12 AM	29	Other Known Causes	East stoker off line, co-fire tripped
11	2/8/04	2:12 PM	28	Other Known Causes	East stoker off line
12	2/8/04	2:18 PM	29	Other Known Causes	East stoker off line
13	2/16/04	7:42 AM	22	Soot Blowing	Soot blowing
14	3/3/04	10:30 PM	29	Other Known Causes	Clinker fell off back wall
15	3/5/04	5:54 AM	27	Soot Blowing	Soot blowing
16	3/6/04	5:54 AM	27	Soot Blowing	Soot blowing
17	3/13/04	6:54 AM	51	Soot Blowing	Soot blowing, co-fire tripped
18	3/13/04	7:00 AM	36	Soot Blowing	Soot blowing, co-fire tripped
19	3/13/04	7:06 AM	33	Soot Blowing	Soot blowing, co-fire tripped
20	3/14/04	11:54 AM	27	Soot Blowing	Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
1/1/04	7:54 AM	26	No	Within emission limits	NV Soot blowing
1/2/04	5:54 AM	22	No	Within emission limits	NV Soot blowing
1/2/04	8:54 AM	21	No	Within emission limits	NV Soot blowing
1/3/04	11:36 AM	21	No	Within emission limits	NV Soot blowing
1/4/04	6:42 AM	21	No	Within emission limits	NV Soot blowing
1/4/04	6:48 PM	21	No	Within emission limits	NV Soot blowing
1/5/04	6:42 AM	21	No	Within emission limits	NV Soot blowing
1/5/04	6:48 PM	21	No	Within emission limits	NV Soot blowing
1/7/04	5:54 AM	24	No	Within emission limits	NV Soot blowing
1/8/04	6:54 AM	22	No	Within emission limits	NV Soot blowing
1/9/04	5:54 AM	24	No	Within emission limits	NV Soot blowing
1/9/04	6:54 AM	21	No	Within emission limits	NV Soot blowing
1/10/04	12:42 PM	22	No	Within emission limits	NV Soot blowing
1/11/04	6:48 AM	22	No	Within emission limits	NV Soot blowing
1/12/04	8:54 AM	21	No	Within emission limits	NV Soot blowing
1/14/04	6:42 AM	23	No	Within emission limits	NV Soot blowing
1/14/04	6:54 PM	22	No	Within emission limits	NV Soot blowing
1/15/04	5:54 AM	23	No	Within emission limits	NV Soot blowing
1/15/04	1:30 PM	22	No	Within emission limits	NV Soot blowing
1/16/04	6:54 AM	25	No	Within emission limits	NV Soot blowing
1/16/04	7:48 AM	21	No	Within emission limits	NV Soot blowing
1/17/04	5:54 AM	22	No	Within emission limits	NV Soot blowing
1/17/04	8:54 AM	23	No	Within emission limits	NV Soot blowing
1/18/04	4:06 AM	22	No	Within emission limits	NV Frozen coal, and ice
1/18/04	4:12 AM	24	No	Within emission limits	#1 Frozen coal, and ice
1/18/04	6:54 AM	21	No	Within emission limits	NV Soot blowing
1/19/04	6:48 AM	23	No	Within emission limits	NV Soot blowing
1/20/04	11:54 AM	24	No	Within emission limits	NV Soot blowing
1/22/04	11:00 AM	23	No	Within emission limits	NV Clinker in front of East stoker
1/23/04	6:53 AM	23	No	Within emission limits	NV Soot blowing
1/23/04	6:54 PM	23	No	Within emission limits	NV Soot blowing
1/25/04	12:54 PM	21	No	Within emission limits	NV Soot blowing
1/25/04	6:00 PM	21	No	Within emission limits	NV Soot blowing
1/26/04	6:48 AM	23	No	Within emission limits	NV Soot blowing
1/26/04	5:54 PM	23	No	Within emission limits	NV Soot blowing
1/27/04	6:42 AM	22	No	Within emission limits	NV Soot blowing
1/27/04	1:24 PM	23	No	Within emission limits	NV Soot blowing
1/28/04	8:36 PM	42	No	Within emission limits	#2 Frozen coal, and ice
1/28/04	8:42 PM	35	No	Within emission limits	#3 Frozen coal, and ice
1/28/04	9:36 PM	23	No	Within emission limits	NV Frozen coal, and ice
1/28/04	9:48 PM	36	No	Within emission limits	#4 Frozen coal, and ice
1/29/04	6:54 AM	26	No	Within emission limits	NV Soot blowing
1/29/04	9:00 PM	30	No	Within emission limits	#5 Frozen coal, and ice
1/30/04	3:36 AM	21	No	Within emission limits	NV Frozen coal, and ice
1/30/04	3:42 AM	34	No	Within emission limits	#6 Frozen coal, and ice
1/30/04	5:00 AM	24	No	Within emission limits	NV Soot blowing
1/31/04	7:48 AM	23	No	Within emission limits	NV Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
2/2/04	5:54 AM	21	No	Within emission limits	NV Soot blowing
2/2/04	7:36 PM	23	No	Within emission limits	NV Soot blowing
2/3/04	4:18 AM	21	No	Within emission limits	NV Soot blowing
2/3/04	5:54 AM	25	No	Within emission limits	NV Soot blowing
2/3/04	6:42 AM	22	No	Within emission limits	NV Adjusting air flows on #10 boiler
2/3/04	6:48 AM	25	No	Within emission limits	#7 Adjusting air flows on #10 boiler
2/3/04	6:54 AM	21	No	Within emission limits	#8 Adjusting air flows on #10 boiler
2/3/04	7:00 AM	26	No	Within emission limits	NV Adjusting air flows on #10 boiler
2/3/04	7:06 AM	25	No	Within emission limits	#9 Adjusting air flows on #10 boiler
2/4/04	5:48 AM	25	No	Within emission limits	NV Soot blowing
2/6/04	9:00 AM	23	No	Within emission limits	NV East stoker off line, co-fire tripped
2/6/04	9:12 AM	29	No	Within emission limits	#10 East stoker off line, co-fire tripped
2/6/04	10:48 AM	21	No	Within emission limits	NV Center stoker wear plate replacement
2/6/04	5:54 PM	23	No	Within emission limits	NV Soot blowing
2/8/04	5:54 AM	21	No	Within emission limits	NV Soot blowing
2/8/04	2:12 PM	28	No	Within emission limits	#11 East stoker off line
2/8/04	2:18 PM	29	No	Within emission limits	#12 East stoker off line
2/8/04	5:54 PM	23	No	Within emission limits	NV Soot blowing
2/9/04	5:54 AM	25	No	Within emission limits	NV Soot blowing
2/9/04	6:48 AM	23	No	Within emission limits	NV Soot blowing
2/9/04	9:18 AM	23	No	Within emission limits	NV East stoker off line, co-fire tripped
2/9/04	11:18 AM	21	No	Within emission limits	NV East stoker off line, co-fire tripped
2/10/04	5:48 AM	22	No	Within emission limits	NV Soot blowing
2/10/04	12:18 PM	23	No	Within emission limits	NV Soot blowing
2/11/04	5:54 AM	23	No	Within emission limits	NV Soot blowing
2/12/04	6:48 AM	21	No	Within emission limits	NV Soot blowing
2/13/04	5:54 PM	22	No	Within emission limits	NV Soot blowing
2/13/04	7:00 PM	21	No	Within emission limits	NV Soot blowing
2/14/04	7:48 AM	21	No	Within emission limits	NV Soot blowing
2/14/04	6:54 PM	24	No	Within emission limits	NV Soot blowing
2/16/04	5:54 AM	22	No	Within emission limits	NV Soot blowing
2/16/04	6:48 AM	24	No	Within emission limits	NV Soot blowing
2/16/04	7:36 AM	23	No	Within emission limits	NV Soot blowing
2/16/04	7:42 AM	22	No	Within emission limits	#13 Soot blowing
2/16/04	5:48 PM	22	No	Within emission limits	NV Soot blowing
2/17/04	6:54 PM	25	No	Within emission limits	NV Soot blowing
2/20/04	5:54 PM	23	No	Within emission limits	NV Soot blowing
2/20/04	6:54 PM	21	No	Within emission limits	NV Soot blowing
2/20/04	7:54 PM	21	No	Within emission limits	NV Soot blowing
2/21/04	6:48 AM	21	No	Within emission limits	NV Soot blowing
2/22/04	6:42 AM	22	No	Within emission limits	NV Soot blowing
2/22/04	8:48 AM	21	No	Within emission limits	NV Soot blowing
2/23/04	11:48 AM	21	No	Within emission limits	NV Soot blowing
2/24/04	6:48 AM	21	No	Within emission limits	NV Soot blowing
2/25/04	5:54 AM	21	No	Within emission limits	NV Soot blowing
2/27/04	7:54 PM	24	No	Within emission limits	NV Soot blowing
2/29/04	6:42 AM	22	No	Within emission limits	NV Soot blowing

Table 2 - 6 minute Opacity Readings > 20% (excluding opacity excursions listed in other table)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
2/29/04	11:48 AM	21	No	Within emission limits	NV Soot blowing
3/1/04	12:00 AM	21	No	Within emission limits	NV Soot blowing
3/1/04	6:42 AM	22	No	Within emission limits	NV Soot blowing
3/1/04	6:54 PM	22	No	Within emission limits	NV Soot blowing
3/2/04	12:06 AM	21	No	Within emission limits	NV Soot blowing
3/2/04	5:54 PM	21	No	Within emission limits	NV Soot blowing
3/3/04	5:54 AM	22	No	Within emission limits	NV Soot blowing
3/3/04	10:30 PM	29	No	Within emission limits	#14 Clinker fell off back wall
3/4/04	5:54 AM	22	No	Within emission limits	NV Soot blowing
3/4/04	5:48 PM	22	No	Within emission limits	NV Soot blowing
3/5/04	5:54 AM	27	No	Within emission limits	#15 Soot blowing
3/5/04	5:54 PM	25	No	Within emission limits	NV Soot blowing
3/6/04	5:54 AM	27	No	Within emission limits	#16 Soot blowing
3/9/04	10:48 AM	26	No	Within emission limits	NV Soot blowing
3/10/04	6:42 AM	21	No	Within emission limits	NV Soot blowing
3/11/04	10:48 AM	24	No	Within emission limits	NV Soot blowing
3/13/04	6:54 AM	51	No	Within emission limits	#17 Soot blowing, co-fire tripped
3/13/04	7:00 AM	36	No	Within emission limits	#18 Soot blowing, co-fire tripped
3/13/04	7:06 AM	33	No	Within emission limits	#19 Soot blowing, co-fire tripped
3/14/04	11:48 AM	21	No	Within emission limits	NV Soot blowing
3/14/04	11:54 AM	27	No	Within emission limits	#20 Soot blowing
3/14/04	12:12 PM	21	No	Within emission limits	NV Soot blowing
3/15/04	6:42 AM	22	No	Within emission limits	NV Soot blowing
3/16/04	6:42 AM	25	No	Within emission limits	NV Soot blowing
3/16/04	5:54 PM	21	No	Within emission limits	NV Soot blowing
3/17/04	6:42 AM	23	No	Within emission limits	NV Soot blowing
3/17/04	7:54 PM	22	No	Within emission limits	NV Soot blowing
3/18/04	6:48 AM	24	No	Within emission limits	NV Soot blowing
3/18/04	6:54 PM	22	No	Within emission limits	NV Soot blowing
3/20/04	6:42 AM	24	No	Within emission limits	NV Soot blowing
3/21/04	6:48 AM	21	No	Within emission limits	NV Soot blowing
3/24/04	9:48 AM	24	No	Within emission limits	NV Soot blowing
3/24/04	6:54 PM	32	No	Within emission limits	NV Soot blowing
3/25/04	5:54 PM	23	No	Within emission limits	NV Soot blowing
3/25/04	7:54 PM	21	No	Within emission limits	NV Soot blowing
3/26/04	5:54 PM	21	No	Within emission limits	NV Soot blowing



COPY

Rec 2/4/2010

April 27, 2009

Tom Gasloli
MDEQ - Air Quality Division
Technical Programs Unit-AQD
P.O. Box 30260
Lansing, Michigan 48909-7760

Re: Boiler No. 5
Quarterly Excess Emissions Report (EER) for Opacity
1st quarter 2009

Dear Mr. Gasloli:

Boiler 5 operated for 129,180 minutes or 2153 hours during the 1st quarter of 2009.

This EER is being submitted in accordance with the quarterly reporting requirements of 40 CFR 60.7(c) and (d). Attached is a summary utilizing MDEQ's report form based on the format required by 40 CFR 60.7(d).

During the 1st quarter, Boiler 5 operated within the opacity emission limits 99.92% of the boiler operating time. To put this compliance rate in perspective, we take note of the fact that 40 CFR 60.7(d) only requires the submission of more than the summary report when the source is in compliance less than 99% of the time. Attached in Table 1 is a list of exceedences including time, duration, and reason for the exceedence.

Consistent with our prior consent agreement, a listing of time, duration, and cause of each six-minute average greater than 20% is attached in Table 2. Note that not all readings greater than 20% constitute an exceedence as defined by MDEQ Rule 301.

We lost our data acquisition system on December 29, 2008 after our 6:24 PM reading. This resulted in 12,180 minutes in the 1st quarter when we did not record any readings. In addition we had 8604 minutes due to opacity equipment malfunction. Cargill had one scheduled shutdown on Boiler 5 during this quarter. Cargill has identified the main causes for the six-minute opacity averages in exceedence of MDEQ Rule 301. They are listed in Table 1. The summary below also includes the percentage of the total exceedences caused by the particular problem.

Cause and Corrective Action

Soot blowing

(17%) 3 Occurrences

There were three soot-blowing exceedences during the quarter.

Cargill Salt

916 S. Riverside Ave.
St. Clair, MI 48079-5335

Tel 810-989-SALT

Startup/shutdown

(22%) 4 Occurrences

Four occurrences were from start-up/shutdown of our Boiler 5. All four occurred during the power change from our AC generator to Edison power.

Process problems

(61%) 11 Occurrences

Nine occurrence happened when were cleaning our baghouse and two occurrences were due to coal quality.

If you have any questions please call me at 810-989-7541.

Sincerely,



Mark J Cronce
Powerhouse Supervisor

cc:

Mr. Robert Elmouchi
MDEQ Senior Environmental Engineer

Ms. Teresa Seidel
MDEQ District Supervisor

Air Quality Division
Michigan Department of Environmental Quality (MDEQ)
27700 Donald Court
Warren, MI 48092-2793

Attachments

Michigan Department of Environmental Quality Air Quality Division Summary #5 Boiler
Table 1 – Opacity Excursions
Table 2 – 6 minute Opacity Readings > 20% (excluding opacity excursions listed in Table 1)

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

Summary Report for Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant: Opacity

Reporting period: First quarter, 2009

Company: Cargill Salt

Unit Description: Boiler #5, 100,000 #/hour

Emission Limit: R336.1301 (1)

Total Source Operation Time 129180 min

Monitor Manufacturer, Model No., & Serial No.:

Durag DR 90, #403074

Emission Data Summary

1	Duration of Excess Emissions (EE) in reporting period due to (minutes):	
a.	Startup/Shutdown	<u>24</u>
b.	Soot Blowing	<u>18</u>
c.	Control Equipment Problems	<u>0</u>
d.	Process Problems	<u>66</u>
e.	Other Known Causes	<u>0</u>
f.	Unknown Causes	<u>0</u>
2	Total Durations of EE's	<u>108</u>
3	Total Duration of EE's/Total Source Operation Time X 100	<u>0.08 %</u>

CEM System Summary

1	CEM system downtime in reporting period due to (minutes):	
a.	Monitor Equipment Malfunctions	<u>8604</u>
b.	Non-Monitor Equipment Malfunctions	<u>12180</u>
c.	Quality Assurance Calibrations (Excess)	<u>234</u>
d.	Other Known Causes	<u>0</u>
e.	Unknown Causes	<u>0</u>
2	Total CEM System Downtime	<u>21018</u>
3	Total CEM System Downtime/Total Source Operation Time X 100	<u>16.27 %</u>

Comments: _____

I certify that the information contained in this report is true, accurate and complete.

Signature: _____

Date: _____

4-27-09

Table 1 - Opacity Exceedances

Number	Date	Time	Boiler 5 Opacity	Comment	Comment Detail
1	1/26/2009	7:06 AM	27.0	Soot blowing	soot blowing
2	2/13/2009	12:24 PM	20.4	Process Problems	Bag house
3	2/14/2009	1:24 AM	20.4	Process Problems	Bag house
4	2/14/2009	2:24 AM	21.0	Process Problems	Bag house
5	2/14/2009	3:24 AM	23.3	Process Problems	Bag house
6	2/16/2009	11:21 AM	20.0	Process Problems	Bag house and poor coal
7	2/16/2009	11:27 AM	21.6	Process Problems	Bag house and poor coal
8	2/16/2009	6:22 PM	22.3	Process Problems	Bag house
9	2/16/2009	6:28 PM	22.6	Process Problems	Bag house
10	3/4/2009	2:05 PM	71.8	Start up / Shutdown	changeover
11	3/4/2009	2:11 PM	58.0	Start up / Shutdown	Changeover
12	3/4/2009	2:17 PM	56.1	Start up / Shutdown	changeover
13	3/4/2009	2:35 PM	31.4	Start up / Shutdown	changeover
14	3/6/2009	7:12 PM	27.2	Process Problems	Bad coal
15	3/8/2009	12:48 AM	20.5	Process Problems	Bad coal
16	3/10/2009	8:12 PM	21.0	Soot blowing	Soot blowing
17	3/10/2009	8:48 PM	23.9	Process Problems	Bag house
18	3/17/2009	7:30 AM	29.4	Soot blowing	Soot blowing

Table 2 - Excursions (Non-Exceedances)

Date	Time	Boiler 5 Opacity	Actual Excursion	Comment	Comment Detail
1/14/2009	5:54 PM	23.7	Soot blowing	Within emission limits	soot blowing
1/14/2009	6:54 PM	22.9	Soot blowing	Within emission limits	soot blowing
1/14/2009	7:30 PM	20.0	Soot blowing	Within emission limits	soot blowing
1/15/2009	5:54 AM	22.8	Soot blowing	Within emission limits	soot blowing
1/15/2009	6:54 AM	21.7	Soot blowing	Within emission limits	soot blowing
1/15/2009	3:00 PM	23.6	Control equipment	Within emission limits	opacity meter
1/21/2009	7:06 AM	21.4	Process problems	Within emission limits	air dryer
1/22/2009	7:18 PM	21.8	Process problems	Within emission limits	bad coal
1/28/2009	7:30 AM	20.7	Soot blowing	Within emission limits	soot blowing
1/29/2009	12:30 PM	20.2	Process problems	Within emission limits	baghouse
1/29/2009	1:30 PM	22.8	Process problems	Within emission limits	baghouse
1/29/2009	6:54 PM	24.6	Process problems	Within emission limits	air dryer bad coal
1/30/2009	7:00 PM	20.4	Soot blowing	Within emission limits	soot blowing
2/2/2009	5:54 PM	20.2	Soot blowing	Within emission limits	soot blowing
2/3/2009	6:54 AM	23.2	Soot blowing	Within emission limits	soot blowing
2/4/2009	5:54 AM	20.1	Soot blowing	Within emission limits	soot blowing
2/4/2009	7:18 AM	23.0	Soot blowing	Within emission limits	soot blowing
2/5/2009	5:00 PM	20.1	Soot blowing	Within emission limits	soot blowing
2/7/2009	5:54 AM	21.3	Soot blowing	Within emission limits	soot blowing
2/8/2009	5:24 AM	20.5	Process problems	Within emission limits	baghouse
2/8/2009	6:18 PM	20.1	Soot blowing	Within emission limits	soot blowing
2/9/2009	7:30 AM	20.6	Soot blowing	Within emission limits	soot blowing
2/9/2009	5:48 PM	20.2	Process problems	Within emission limits	baghouse
2/10/2009	5:54 PM	20.5	Soot blowing	Within emission limits	soot blow
2/11/2009	5:47 PM	20.7	Process problems	Within emission limits	baghouse
2/11/2009	7:05 PM	21.0	Soot blowing	Within emission limits	soot blowing
2/12/2009	6:54 AM	20.1	Soot blowing	Within emission limits	soot blowing
2/12/2009	6:06 PM	20.1	Soot blowing	Within emission limits	soot blowing
2/13/2009	6:00 AM	20.5	Soot blowing	Within emission limits	soot blowing
2/13/2009	11:30 AM	20.0	Process problems	Within emission limits	bag house
2/13/2009	12:30 PM	22.9	Process problems	Within emission limits	bag house
2/13/2009	3:30 PM	20.2	Process problems	Within emission limits	bag house
2/13/2009	5:54 PM	21.6	Soot blowing	Within emission limits	soot blowing
2/13/2009	7:06 PM	21.4	Soot blowing	Within emission limits	soot blowing
2/13/2009	9:30 PM	21.5	Process problems	Within emission limits	baghouse
2/13/2009	10:30 PM	23.1	Process problems	Within emission limits	baghouse
2/13/2009	11:30 PM	23.9	Process problems	Within emission limits	baghouse
2/14/2009	1:30 AM	23.3	Process problems	Within emission limits	baghouse
2/14/2009	2:30 AM	23.9	Process problems	Within emission limits	baghouse
2/14/2009	3:30 AM	24.2	Process problems	Within emission limits	baghouse
2/14/2009	2:29 PM	21.3	Process problems	Within emission limits	Baghouse and bad coal
2/14/2009	5:53 PM	21.0	Soot blowing	Within emission limits	soot blowing
2/14/2009	6:53 PM	21.6	Soot blowing	Within emission limits	soot blowing
2/15/2009	5:55 PM	20.6	Soot blowing	Within emission limits	soot blowing

Table 2 - Excursions (Non-Exceedances)

2/15/2009	7:01 PM	23.8	Soot blowing	Within emission limits	soot blowing
2/16/2009	6:57 AM	21.8	Soot blowing	Within emission limits	soot blowing
2/16/2009	11:27 AM	21.6	Process problems	Within emission limits	bag house and poor coal
2/16/2009	10:27 AM	20.6	Process problems	Within emission limits	bag house and poor coal
2/16/2009	5:52 PM	25.8	Soot blowing	Within emission limits	soot blowing
2/16/2009	7:34 PM	23.9	Soot blowing	Within emission limits	soot blowing
2/17/2009	1:30 PM	21.1	Process problems	Within emission limits	bag house bad coal
2/18/2009	7:00 AM	21.2	Soot blowing	Within emission limits	soot blowing
2/18/2009	5:48 PM	21.4	Soot blowing	Within emission limits	soot blowing
2/18/2009	6:54 PM	20.0	Soot blowing	Within emission limits	soot blowing
2/19/2009	5:54 AM	22.1	Soot blowing	Within emission limits	soot blowing
2/20/2009	6:00 AM	20.0	Soot blowing	Within emission limits	soot blowing
2/20/2009	8:00 PM	20.1	Soot blowing	Within emission limits	soot blowing
2/20/2009	9:36 PM	21.0	Soot blowing	Within emission limits	soot blowing
2/21/2009	8:36 PM	20.5	Soot blowing	Within emission limits	soot blowing
2/22/2009	7:18 PM	21.0	Soot blowing	Within emission limits	soot blowing
2/24/2009	7:18 AM	24.2	Soot blowing	Within emission limits	soot blowing chain fell off
2/25/2009	6:54 PM	20.0	Soot blowing	Within emission limits	soot blowing
2/26/2009	5:54 PM	20.3	Soot blowing	Within emission limits	soot blowing
2/26/2009	7:00 PM	20.8	Soot blowing	Within emission limits	soot blowing
2/28/2009	12:42 AM	22.7	Process problems	Within emission limits	baghouse
2/28/2009	6:00 PM	20.8	Soot blowing	Within emission limits	soot blowing
3/1/2009	6:54 PM	20.3	Soot blowing	Within emission limits	soot blowing
3/2/2009	10:24 PM	20.2	Soot blowing	Within emission limits	soot blowing
3/3/2009	6:42 AM	21.2	Soot blowing	Within emission limits	soot blowing
3/4/2009	4:05 PM	20.4	Start up / Shut down	Within emission limits	changeover
3/5/2009	12:12 AM	20.6	Soot blowing	Within emission limits	soot blowing
3/5/2009	2:06 AM	20.1	Process problems	Within emission limits	bad coal
3/6/2009	5:54 AM	20.4	Soot blowing	Within emission limits	soot blowing
3/7/2009	5:54 PM	20.1	Soot blowing	Within emission limits	soot blowing
3/8/2009	12:42 AM	21.3	Process problems	Within emission limits	bad coal
3/8/2009	6:00 AM	21.2	Soot blowing	Within emission limits	soot blowing
3/9/2009	5:53 AM	21.3	Soot blowing	Within emission limits	soot blowing
3/10/2009	5:53 AM	21.4	Soot blowing	Within emission limits	soot blowing
3/10/2009	3:42 PM	21.8	Process problems	Within emission limits	bag house
3/11/2009	5:54 AM	22.6	Soot blowing	Within emission limits	soot blowing
3/11/2009	7:18 AM	20.1	Soot blowing	Within emission limits	soot blowing
3/11/2009	3:18 PM	20.3	Process problems	Within emission limits	bag house
3/12/2009	2:48 PM	24.6	Soot blowing	Within emission limits	soot blowing bad coal
3/12/2009	3:54 PM	22.9	Soot blowing	Within emission limits	soot blowing bag house
3/12/2009	9:06 PM	20.8	Soot blowing	Within emission limits	soot blowing
3/13/2009	12:24 PM	20.3	Process problems	Within emission limits	bag house
3/13/2009	8:30 PM	20.9	Process problems	Within emission limits	baghouse
3/13/2009	10:00 PM	20.1	Soot blowing	Within emission limits	sootblowing
3/13/2009	11:18 PM	21.5	Soot blowing	Within emission limits	sootblowing
3/14/2009	6:12 PM	20.8	Process problems	Within emission limits	baghouse
3/15/2009	12:06 AM	24.8	Process problems	Within emission limits	baghouse

Table 2 - Excursions (Non-Exceedances)

3/15/2009	4:05 AM	20.6	Process problems	Within emission limits	baghouse
3/15/2009	5:48 PM	20.2	Soot blowing	Within emission limits	soot blowing
3/15/2009	6:54 PM	22.0	Soot blowing	Within emission limits	soot blowing
3/16/2009	5:54 PM	20.9	Soot blowing	Within emission limits	soot blowing
3/16/2009	7:06 PM	24.1	Soot blowing	Within emission limits	soot blowing
3/17/2009	5:54 AM	20.3	Soot blowing	Within emission limits	soot blowing
3/18/2009	6:36 AM	20.4	Soot blowing	Within emission limits	soot blowing
3/19/2009	1:18 AM	21.5	Soot blowing	Within emission limits	soot blowing
3/19/2009	4:42 AM	20.6	Soot blowing	Within emission limits	soot blowing
3/20/2009	6:36 AM	20.7	Soot blowing	Within emission limits	soot blowing
3/20/2009	8:24 PM	20.2	Soot blowing	Within emission limits	soot blowing
3/21/2009	6:06 PM	20.4	Soot blowing	Within emission limits	soot blowing
3/22/2009	6:00 PM	20.4	Soot blowing	Within emission limits	soot blowing
3/23/2009	6:00 PM	21.3	Soot blowing	Within emission limits	soot blowing
3/25/2009	7:24 AM	20.6	Soot blowing	Within emission limits	soot blowing
3/26/2009	7:24 AM	21.9	Soot blowing	Within emission limits	soot blowing
3/26/2009	10:00 AM	21.8	Soot blowing	Within emission limits	soot blowing
3/26/2009	6:12 PM	20.3	Soot blowing	Within emission limits	soot blowing
3/27/2009	5:54 AM	20.1	Soot blowing	Within emission limits	soot blowing
3/27/2009	8:35 PM	21.4	Soot blowing	Within emission limits	soot blowing
3/31/2009	6:00 AM	21.8	Soot blowing	Within emission limits	soot blowing
3/31/2009	7:54 AM	21.1	Soot blowing	Within emission limits	soot blowing
3/31/2009	8:53 PM	20.6	Soot blowing	Within emission limits	soot blowing

Table 1 - Opacity Exceedances (January 1, 2009 - December 31, 2009)

	Number	Date	Time	Boiler 5 Opacity	Comment	Comment Detail
Q1	1	1/26/2009	7:06 AM	27.0	Soot blowing	soot blowing
	2	2/13/2009	12:24 PM	20.4	Process Problems	Bag house
	3	2/14/2009	1:24 AM	20.4	Process Problems	Bag house
	4	2/14/2009	2:24 AM	21.0	Process Problems	Bag house
	5	2/14/2009	3:24 AM	23.3	Process Problems	Bag house
	6	2/16/2009	11:21 AM	20.0	Process Problems	Bag house and poor coal
	7	2/16/2009	11:27 AM	21.6	Process Problems	Bag house and poor coal
	8	2/16/2009	6:22 PM	22.3	Process Problems	Bag house
	9	2/16/2009	6:28 PM	22.6	Process Problems	Bag house
	10	3/4/2009	2:05 PM	71.8	Start up / Shutdown	changeover
	11	3/4/2009	2:11 PM	58.0	Start up / Shutdown	Changeover
	12	3/4/2009	2:17 PM	56.1	Start up / Shutdown	changeover
	13	3/4/2009	2:35 PM	31.4	Start up / Shutdown	changeover
	14	3/6/2009	7:12 PM	27.2	Process Problems	Bad coal
	15	3/8/2009	12:48 AM	20.5	Process Problems	Bad coal
	16	3/10/2009	8:12 PM	21.0	Soot blowing	Soot blowing
	17	3/10/2009	8:48 PM	23.9	Process Problems	Bag house
	18	3/17/2009	7:30 AM	29.4	Soot blowing	Soot blowing
Q2	1	4/5/2009	11:24 PM	28.1	Bag house	Process Problems
	2	4/10/2009	12:11 AM	40.9	Light #5 boiler	Startup/Shutdown
	3	4/10/2009	12:18 AM	27.2	Light #5 boiler	Startup/Shutdown
	4	4/14/2009	5:36 AM	30.0	East stoker failure	Process Problems
	5	4/14/2009	5:42 AM	49.0	East stoker failure	Process Problems
	6	4/14/2009	5:48 AM	32.4	East stoker failure	Process Problems
	7	4/14/2009	6:00 AM	20.8	East stoker failure	Process Problems
	8	4/14/2009	6:06 AM	22.8	East stoker failure	Process Problems
	9	4/25/2009	3:12 PM	36.4	Power outage - DTE	Other Known Causes
	10	4/25/2009	3:18 PM	47.2	Power outage - DTE	Other Known Causes
	11	4/25/2009	3:24 PM	21.8	Power outage - DTE	Other Known Causes
	12	5/12/2009	10:06 AM	27.6	#5 On coal	Startup/Shutdown
	13	5/12/2009	10:18 AM	21.1	#5 On coal	Startup/Shutdown
	14	5/12/2009	10:24 AM	26.3	#5 On coal	Startup/Shutdown
	15	5/12/2009	10:30 AM	36.8	#5 On coal	Startup/Shutdown
	16	5/12/2009	10:36 AM	50.1	#5 On coal	Startup/Shutdown
	17	5/12/2009	10:42 AM	26.0	#5 On coal	Startup/Shutdown
	18	5/12/2009	10:48 AM	30.2	#5 On coal	Startup/Shutdown
	19	5/12/2009	10:54 AM	31.3	#5 On coal	Startup/Shutdown
	20	5/12/2009	11:00 AM	26.5	#5 On coal	Startup/Shutdown
	21	5/12/2009	11:06 AM	21.4	#5 On coal	Startup/Shutdown
	22	5/12/2009	11:12 AM	20.0	#5 On coal	Startup/Shutdown
	23	5/13/2009	7:42 AM	22.1	Power change	Startup/Shutdown
	24	5/13/2009	8:24 AM	20.6	Power change	Startup/Shutdown
	25	5/13/2009	8:30 AM	20.9	Power change	Startup/Shutdown
	26	5/13/2009	8:36 AM	20.9	Power change	Startup/Shutdown
	27	6/1/2009	6:11 PM	20.8	Soot Blowing	Soot Blowing
	28	6/27/2009	6:41 PM	29.7	Bad Coal	Process Problems
Q3	1	8/7/2009	3:06 PM	37.9	Process problems	Grate drive malfunction
	2	7/27/2009	12:29 PM	34.1	Process problems	Buildup blocking air nozzle
Q4	1	12/14/2009	9:12 AM	29.9	Startup / Shutdown	Restart boiler
	2	12/14/2009	2:12 PM	34.4	Startup / Shutdown	Power change



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June 18, 2009

Tom Gasloli
MDEQ - Air Quality Division
Technical Programs Unit-AQD
P.O. Box 30260
Lansing, Michigan 48909-7760

Re: Boiler No. 10
Correction to Excess Emissions Report for the 1st Quarter of 2009

Dear Mr. Gasloli:

This corrected emissions summary page is being submitted as an amended summary to the Q1 2009 excess emission report for Boiler 10 that was mailed to you on 4/29/09.

Upon review of this previously submitted report, it was discovered that the CEM System Summary data was not accurate. It appears that a data entry error was calculated into 1.a of the CEM System Summary when Monitor Equipment Malfunctions accounted for 2,158 minutes. This has been corrected to zero minutes.

Also, nine days of emission data that were previously excluded from the Total CEM System Downtime calculation has been included in the calculation. This loss of data was due to the failure of our data acquisition system (central computer node) as discussed in the previous report's cover letter sent on 4/29/09. CEM system downtime had previously been reported at 1.7% and now has been corrected to 7.7%.

If you have any questions regarding this revised summary, please call me at 810-989-7544.

Sincerely,

Sheri Ofiara
EHS Coordinator

cc:

Mr. Robert Elmouchi
MDEQ Senior Environmental Engineer

Ms. Teresa Seidel
MDEQ District Supervisor

Air Quality Division
Michigan Department of Environmental Quality (MDEQ)
27700 Donald Court
Warren, MI 48092-2793

Cargill Salt

916 S. Riverside Ave.
St. Clair, MI 48079-5335

Tel 810-989-SALT



Rec
2/4/2010
COPY

April 27, 2009

Tom Gasloli
MDEQ - Air Quality Division
Technical Programs Unit-AQD
P.O. Box 30260
Lansing, Michigan 48909-7760

Re: Boiler No. 10
Emissions Report for the 1st Quarter of 2009

Dear Mr. Gasloli:

This Semiannual Emissions Report is being submitted in accordance with the reporting requirements from the State of Michigan Renewable Operating Permit No. 199700084 Table E-01.3 EGBOILER10. Boiler No. 10 was operated using Natural Gas only during the entire reporting period. No excess emissions occurred during the semiannual reporting period of the first quarter of 2009. The boiler operated for 2,158 hours for the first quarter of 2009.

The average NO_x and CO₂ emission rates (lb/MM Btu heat input) and the 30-day average NO_x emission rates (lb/MM Btu heat input) are summarized in Attachment A.

There was zero operating days when the 30-day average NO_x emission rate exceeded the limit under 60.44b.

There were nine days of emission data excluded from the calculations of average emission rates. We lost our Data Acquisition System on December 29, 2008 at 6:24 pm. It was restored at 11:00 am on morning of January 9, 2009.

"F" factor is 1,040 dscf / MMBtu.

The pollutant concentrations did not exceed full span of the CEMS during the first half of the year.

No modifications were made to the CEM that could affect the ability of the CEMS to comply with PS 2 or 3.

Attachment A contains the daily CEMS.

Attachment B contains the daily CEMS drift test.

Attachment C contains the NO_x / CO₂ Span gas Certificate of Analysis.

If you have any questions please call me at 810-989-7543.



Boiler 10 Emmisions Quarterly Report

Salt Division - St. Clair, MI

Quarter: 1

Daily Boiler Emmisions Data

Date	NOx - Parts per Million	NOx - lbs per mmbtu	NOx - lbs per Hour	CO2 (%)	30 Day Avg
01/09/09	29.55	0.053	0.00279	6.95	0.0533
01/10/09	29.78	0.054	0.00442	6.90	0.0538
01/11/09	29.60	0.055	0.00276	6.75	0.0541
01/12/09	29.68	0.055	0.00287	6.75	0.0545
01/13/09	29.14	0.054	0.00278	6.75	0.0544
01/14/09	30.02	0.057	0.00303	6.64	0.0550
01/15/09	31.26	0.053	0.00325	7.35	0.0547
01/16/09	31.43	0.054	0.00292	7.32	0.0545
01/17/09	30.65	0.055	0.00308	6.90	0.0546
01/18/09	28.88	0.053	0.00325	6.81	0.0544
01/19/09	29.56	0.053	0.00321	6.92	0.0543
01/20/09	35.06	0.064	0.00406	6.60	0.0552
01/21/09	26.25	0.048	0.00289	6.78	0.0546
01/22/09	25.17	0.046	0.00322	6.81	0.0539
01/23/09	24.86	0.046	0.00273	6.79	0.0533
01/24/09	24.88	0.046	0.00254	6.80	0.0527
01/25/09	25.16	0.046	0.00272	6.81	0.0523
01/26/09	25.51	0.046	0.00271	6.94	0.0519
01/27/09	25.16	0.046	0.00255	6.88	0.0515
01/28/09	23.83	0.047	0.00241	6.29	0.0513
01/29/09	25.18	0.046	0.00302	6.80	0.0511
01/30/09	24.34	0.046	0.00251	6.59	0.0508
01/31/09	25.62	0.047	0.00292	6.81	0.0508
02/01/09	25.48	0.047	0.00243	6.83	0.0508
02/02/09	24.94	0.045	0.00298	6.87	0.0506
02/03/09	25.15	0.046	0.00305	6.82	0.0504
02/04/09	25.76	0.046	0.00288	6.91	0.0502
02/05/09	26.30	0.047	0.00300	6.98	0.0501
02/06/09	25.29	0.046	0.00279	6.86	0.0499
02/07/09	23.36	0.043	0.00267	6.74	0.0497
02/08/09	25.18	0.044	0.00267	7.09	0.0495
02/09/09	24.86	0.044	0.00263	6.99	0.0492

Daily Boiler Emmisions Data

Date	NOx - Parts per Million	NOx - lbs per mmbtu	NOx - lbs per Hour	CO2 (%)	30 Day Avg
02/10/09	22.91	0.043	0.00249	6.65	0.0489
02/11/09	21.75	0.044	0.00232	6.12	0.0487
02/12/09	24.01	0.045	0.00277	6.70	0.0483
02/13/09	24.01	0.045	0.00267	6.64	0.0480
02/14/09	25.05	0.046	0.00287	6.73	0.0477
02/15/09	24.15	0.046	0.00236	6.59	0.0474
02/16/09	25.58	0.046	0.00320	6.99	0.0471
02/17/09	25.17	0.046	0.00287	6.83	0.0468
02/18/09	22.84	0.046	0.00251	6.20	0.0465
02/19/09	25.25	0.047	0.00317	6.75	0.0463
02/20/09	27.45	0.049	0.00414	7.00	0.0458
02/21/09	27.89	0.050	0.00422	6.91	0.0458
02/22/09	27.03	0.049	0.00390	6.82	0.0460
02/23/09	30.59	0.054	0.00426	7.06	0.0463
02/24/09	32.40	0.057	0.00428	7.02	0.0467
02/25/09	29.34	0.055	0.00339	6.66	0.0470
02/26/09	31.30	0.055	0.00451	7.00	0.0473
02/27/09	29.21	0.054	0.00391	6.66	0.0476
02/28/09	31.18	0.055	0.00385	7.01	0.0479
03/01/09	30.65	0.055	0.00345	6.91	0.0482
03/02/09	30.82	0.056	0.00378	6.85	0.0486
03/03/09	31.76	0.057	0.00391	6.94	0.0488
03/04/09	31.32	0.057	0.00470	6.45	0.0491
03/05/09	30.62	0.055	0.00415	6.85	0.0494
03/06/09	28.62	0.053	0.00403	6.72	0.0496
03/07/09	27.78	0.052	0.00348	6.60	0.0498
03/08/09	28.49	0.053	0.00372	6.62	0.0500
03/09/09	29.75	0.054	0.00402	6.80	0.0503
03/10/09	28.31	0.053	0.00364	6.59	0.0506
03/11/09	30.42	0.059	0.00385	6.37	0.0511
03/12/09	32.98	0.058	0.00451	7.09	0.0515
03/13/09	32.53	0.058	0.00495	6.97	0.0520
03/14/09	32.18	0.057	0.00468	7.01	0.0524
03/15/09	30.65	0.056	0.00402	6.83	0.0527
03/16/09	30.28	0.055	0.00411	6.85	0.0530
03/17/09	30.08	0.055	0.00365	6.73	0.0533
03/18/09	28.16	0.057	0.00380	6.13	0.0537

Daily Boiler Emmisions Data

Date	NOx - Parts per Million	NOx - lbs per mmbtu	NOx - lbs per Hour	CO2 (%)	30 Day Avg
03/19/09	33.22	0.058	0.00501	7.12	0.0541
03/20/09	32.53	0.056	0.00473	7.22	0.0544
03/21/09	31.87	0.055	0.00439	7.17	0.0547
03/22/09	30.76	0.055	0.00393	6.99	0.0550
03/23/09	32.70	0.057	0.00487	7.09	0.0553
03/24/09	32.45	0.058	0.00396	7.01	0.0555
03/25/09	27.87	0.055	0.00365	6.31	0.0557
03/26/09	32.41	0.058	0.00520	6.92	0.0558
03/27/09	32.98	0.059	0.00507	6.96	0.0559
03/28/09	32.19	0.058	0.00524	6.86	0.0560
03/29/09	30.79	0.058	0.00506	6.65	0.0561
03/30/09	32.54	0.057	0.00509	7.04	0.0562
03/31/09	32.58	0.057	0.00501	7.09	0.0562

**Boiler 10 Emmisions Quarterly Report**

Salt Division - St. Clair, M

Quarter: #

Daily Calibration Data

Date	NOx ppm Zero	NOx ppm Span	CO2 (%) Zero	CO2 (%) Span
1/10/2009	0.08	56.74	0.11	11.80
1/11/2009	0.00	57.22	0.00	11.20
1/12/2009	0.01	56.53	0.00	10.98
1/13/2009	0.02	55.43	0.02	11.15
1/14/2009	0.01	56.02	0.00	11.03
1/15/2009	0.00	55.43	0.02	11.32
1/16/2009	0.10	57.10	0.33	11.64
1/17/2009	0.06	57.02	0.10	11.14
1/18/2009	0.08	54.29	0.18	10.96
1/19/2009	0.06	54.44	0.10	10.79
1/20/2009	0.07	54.86	0.09	10.84
1/21/2009	0.89	48.14	0.01	10.82
1/22/2009	0.00	46.63	0.00	10.70
1/23/2009	0.00	47.04	0.00	11.30
1/24/2009	0.00	46.91	0.00	11.27
1/25/2009	0.00	46.64	0.00	11.26
1/26/2009	0.00	47.63	0.00	11.29
1/27/2009	0.00	47.09	0.00	11.19
1/28/2009	0.00	46.16	0.00	10.74
1/29/2009	0.00	46.09	0.00	10.86
1/30/2009	0.00	46.04	0.00	10.89
1/31/2009	0.00	46.01	0.00	10.39
2/1/2009	0.00	44.52	0.00	10.71
2/2/2009	0.00	45.71	0.00	10.92
2/3/2009	0.00	46.29	0.00	10.96
2/4/2009	0.00	46.32	0.00	10.91
2/5/2009	0.00	47.14	0.00	11.41
2/6/2009	0.00	47.06	0.00	10.97
2/7/2009	0.00	46.43	0.00	11.04
2/8/2009	0.00	47.18	0.08	11.08
2/9/2009	0.00	47.89	0.04	11.23
2/10/2009	0.00	46.29	0.00	10.80

Daily Calibration Data

Date	NOx ppm Zero	NOx ppm Span	CO2 (%) Zero	CO2 (%) Span
2/11/2009	0.00	46.18	0.00	10.74
2/12/2009	0.00	45.67	0.00	10.48
2/13/2009	0.00	46.45	0.00	11.05
2/14/2009	0.00	46.71	0.00	10.88
2/15/2009	0.00	46.69	0.00	11.17
2/16/2009	0.00	47.00	0.00	11.06
2/17/2009	0.00	47.10	0.00	10.93
2/18/2009	0.00	46.09	0.00	10.72
2/19/2009	0.00	46.26	0.00	10.76
2/20/2009	0.00	46.36	0.00	10.62
2/21/2009	0.00	47.05	0.00	10.87
2/22/2009	0.00	46.43	0.00	10.60
2/23/2009	0.00	47.63	0.00	11.03
2/24/2009	0.16	55.47	0.00	11.42
2/25/2009	0.16	54.97	0.00	11.21
2/26/2009	0.18	54.92	0.06	11.23
2/27/2009	0.10	53.75	0.00	10.61
2/28/2009	0.15	55.31	0.00	11.35
3/1/2009	0.11	55.08	0.00	11.13
3/2/2009	0.12	55.09	0.00	11.27
3/3/2009	0.08	55.19	0.00	11.31
3/4/2009	0.09	55.28	0.00	11.07
3/5/2009	0.11	55.04	0.00	11.08
3/6/2009	0.18	53.78	0.00	10.68
3/7/2009	0.19	54.62	0.00	10.85
3/8/2009	0.19	54.31	0.00	10.92
3/9/2009	0.18	54.25	0.00	10.72
3/10/2009	0.17	54.68	0.00	10.97
3/11/2009	0.19	53.81	0.00	10.56
3/12/2009	1.10	56.20	0.00	11.20
3/13/2009	0.41	55.55	0.00	11.11
3/14/2009	0.24	55.04	0.00	10.99
3/15/2009	0.28	54.88	0.00	11.03
3/16/2009	0.24	54.83	0.00	11.02
3/17/2009	0.20	54.87	0.00	10.92
3/18/2009	0.16	53.83	0.00	10.63
3/19/2009	0.14	54.55	0.00	10.81

Daily Calibration Data

Date	NOx ppm Zero	NOx ppm Span	CO2 (%) Zero	CO2 (%) Span
3/20/2009	0.16	55.32	0.00	11.19
3/21/2009	0.16	55.21	0.00	11.30
3/22/2009	0.16	55.20	0.00	11.12
3/23/2009	0.13	55.35	0.00	11.29
3/24/2009	0.17	55.15	0.00	11.23
3/25/2009	0.16	54.07	0.00	10.84
3/26/2009	0.17	54.39	0.00	10.87
3/27/2009	0.15	54.45	0.00	10.89
3/28/2009	0.16	54.30	0.00	10.75
3/29/2009	0.19	53.22	0.00	10.21
3/30/2009	0.13	54.11	0.00	10.66
3/31/2009	0.16	54.33	0.00	11.04

PRAXAIR

*Changed cylinder
Wednesday 8/20/08 @ 9:15 AM*

Praxair Distribution, Inc
145 Shimersville Road
Bethlehem, PA 18015

Tel: (610) 691-2474
Fax: (610) 758-9103

Attachment C

CERTIFICATE OF ANALYSIS / EPA PROTOCOL GAS

CUSTOMER **PRAXAIR DETROIT**

P.O NUMBER **1682E84-01**

REFERENCE STANDARD

COMPONENT	NIST SRM NO.	CYLINDER NO.	CONCENTRATION
99.6 PPM NITRIC OXIDE GMS VS	1684b	CAL015588	97.71 %
17.96 % CARBON DIOXIDE GMS VS	2745	CAL016031	15.633%

ANALYZER READINGS

R=REFERENCE STANDARD

Z=ZERO GAS

C=GAS CANDIDATE

1. COMPONENT 99.6 PPM NITRIC OXIDE GMS VS ANALYZER MAKE-MODEL-S/N				TECO MODEL 42C 42CHL-55533-304			
ANALYTICAL PRINCIPLE		CHEMILUMINESCENCE		LAST CALIBRATION DATE		08/31/07	
FIRST ANALYSIS DATE		09/17/07		SECOND ANALYSIS DATE		09/24/07	
Z 0	R 99.1	C 54.2	CONC. 55.1	Z 0	R 95.2	C 52.3	CONC. 56.9
R 97.8	Z 0	C 53.7	CONC. 54.6	R 94.7	Z 0	C 52.3	CONC. 54.5
Z 0	C 53.4	R 97.1	CONC. 54.3	Z 0	C 52.3	R 94.6	CONC. 54.5
U/M PPM	MEAN TEST ASSAY		54.6	U/M PPM	MEAN TEST ASSAY		54.9
COMPONENT 17.96 % CARBON DIOXIDE GMS VS ANALYZER MAKE-MODEL-S/N				SIEMENS ULTRAMAT 5E SN: D2-412			
ANALYTICAL PRINCIPLE		NON-DISPERSIVE INFRARED		LAST CALIBRATION DATE		08/31/07	
FIRST ANALYSIS DATE		09/17/07		SECOND ANALYSIS DATE			
Z 0	R 17.70	C 11.04	CONC. 11.19	Z	R	C	CONC.
R 17.72	Z 0	C 11.04	CONC. 11.19	R	Z	C	CONC.
Z 0	C 11.04	R 17.72	CONC. 11.19	Z	C	R	CONC.
U/M %	MEAN TEST ASSAY		11.19	U/M %	MEAN TEST ASSAY		

VALUES NOT VALID BELOW 150 PSIG
UNCERTAINTIES: NO₂±0.6PPM; CO₂±0.04%

THIS CYLINDER NO.	CC102143	CERTIFIED CONCENTRATION	
HAS BEEN CERTIFIED ACCORDING TO SECTION	2.2	NITRIC OXIDE	54.8PPM
OF TRACEABILITY PROTOCOL NO.	EPA-600/R97/121	CARBON DIOXIDE	11.19%
PROCEDURE	G1	NITROGEN	BALANCE
CERTIFIED ACCURACY	± 1 % NIST TRACEABLE	NOX (FOR REFERENCE ONLY)	54.8PPM
CYLINDER PRESSURE	2000 PSIG		
CERTIFICATION DATE	09/24/07		
EXPIRATION DATE	09/24/09 TERM		

ANALYZED BY

MELISSA BORDIERE

CERTIFIED BY *TS* 9/24/07